

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/10/2018

Reviewed on 09/10/2018

## 1 Identification

- **Product identifier**
- **Trade name:** LOWICRYL MONOSTEP K4M POLAR
- **Article number:** 14335
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

Flam. Liq. 4 H227 Combustible liquid.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05



GHS06



GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
Benzoin Methyl Ether  
2-hydroxyethyl acrylate

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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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mequinol

· **Hazard statements**

Combustible liquid.

Toxic if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

· **Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 3

Fire = 2

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 3

Fire = 2

Reactivity = 0

· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**· **Description:** Mixture of the substances listed below with nonhazardous additions.· **Dangerous components:**

|            |                                                   |           |
|------------|---------------------------------------------------|-----------|
| 3524-62-7  | Benzoin Methyl Ether                              | >25-≤50%  |
| 27813-02-1 | methacrylic acid, monoester with propane-1,2-diol | >10-≤25%  |
| 818-61-1   | 2-hydroxyethyl acrylate                           | >2.5-≤10% |

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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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|          |                    |           |
|----------|--------------------|-----------|
| 142-09-6 | Hexyl methacrylate | >2.5-≤10% |
| 150-76-5 | mequinol           | ≤2.5%     |

## 4 First-aid measures

- **Description of first aid measures**

- **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

In case of irregular breathing or respiratory arrest provide artificial respiration.

- **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**

Do not induce vomiting; immediately call for medical help.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **Special hazards arising from the substance or mixture** No further relevant information available.

- **Advice for firefighters**

- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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### · Protective Action Criteria for Chemicals

#### · PAC-1:

|          |                                   |                      |
|----------|-----------------------------------|----------------------|
| 109-16-0 | Triethylene glycol dimethacrylate | 33 mg/m <sup>3</sup> |
| 818-61-1 | 2-hydroxyethyl acrylate           | 0.1 ppm              |
| 150-76-5 | mequinol                          | 15 mg/m <sup>3</sup> |

#### · PAC-2:

|          |                                   |                       |
|----------|-----------------------------------|-----------------------|
| 109-16-0 | Triethylene glycol dimethacrylate | 360 mg/m <sup>3</sup> |
| 818-61-1 | 2-hydroxyethyl acrylate           | 1.1 ppm               |
| 150-76-5 | mequinol                          | 49 mg/m <sup>3</sup>  |

#### · PAC-3:

|          |                                   |                         |
|----------|-----------------------------------|-------------------------|
| 109-16-0 | Triethylene glycol dimethacrylate | 2,100 mg/m <sup>3</sup> |
| 818-61-1 | 2-hydroxyethyl acrylate           | 21 ppm                  |
| 150-76-5 | mequinol                          | 320 mg/m <sup>3</sup>   |

## 7 Handling and storage

### · Handling:

#### · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

#### · Information about protection against explosions and fires: No special measures required.

#### · Conditions for safe storage, including any incompatibilities

#### · Storage:

· Requirements to be met by storerooms and receptacles: No special requirements.

· Information about storage in one common storage facility: Not required.

· Further information about storage conditions: Keep receptacle tightly sealed.

· Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

### · Control parameters

#### · Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

#### 150-76-5 mequinol

REL Long-term value: 5 mg/m<sup>3</sup>

TLV Long-term value: 5 mg/m<sup>3</sup>

· Additional information: The lists that were valid during the creation were used as basis.

### · Exposure controls

#### · Personal protective equipment:

#### · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

|                 |                 |
|-----------------|-----------------|
| Form:           | Liquid          |
| Color:          | Colorless       |
| Odor:           | Strong          |
| Odor threshold: | Not determined. |

· **pH-value:** Not determined.

· **Change in condition**

|                              |                   |
|------------------------------|-------------------|
| Melting point/Melting range: | Undetermined.     |
| Boiling point/Boiling range: | 246 °C (474.8 °F) |

· **Flash point:** 90 °C (194 °F)

· **Flammability (solid, gaseous):** Not flammable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Not determined.

· **Explosion limits:**

|        |                 |
|--------|-----------------|
| Lower: | Not determined. |
| Upper: | Not determined. |

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|                                                   |                                            |
|---------------------------------------------------|--------------------------------------------|
| · <b>Vapor pressure:</b>                          | Not determined.                            |
| · <b>Density:</b>                                 | Not determined.                            |
| · <b>Relative density</b>                         | Not determined.                            |
| · <b>Vapor density</b>                            | Not determined.                            |
| · <b>Evaporation rate</b>                         | Not determined.                            |
| · <b>Solubility in / Miscibility with Water:</b>  | Not miscible or difficult to mix.          |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                            |
| · <b>Viscosity:</b>                               |                                            |
| <b>Dynamic:</b>                                   | Not determined.                            |
| <b>Kinematic:</b>                                 | Not determined.                            |
| · <b>Solvent content:</b>                         |                                            |
| <b>VOC content:</b>                               | 0.00 %<br>0.0 g/l / 0.00 lb/gal            |
| <b>Solids content:</b>                            | 0.0 %                                      |
| · <b>Other information</b>                        | No further relevant information available. |

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Toxic  
Harmful  
Corrosive  
Irritant  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Ecotoxical effects:**

- **Remark:** Toxic for fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- **UN-Number**

- **DOT, ADR, IMDG, IATA**

UN2810

- **UN proper shipping name**

- **DOT**

Toxic, liquids, organic, n.o.s. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)

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|                                                                                   |                                                                                                                  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| · <b>ADR</b>                                                                      | 2810 Toxic, liquids, organic, n.o.s. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)                             |
| · <b>IMDG, IATA</b>                                                               | TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)                                    |
| · <b>Transport hazard class(es)</b>                                               |                                                                                                                  |
| · <b>DOT</b>                                                                      |                                                                                                                  |
|  |                                                                                                                  |
| · <b>Class</b>                                                                    | 6.1 Toxic substances                                                                                             |
| · <b>Label</b>                                                                    | 6.1                                                                                                              |
| · <b>ADR, IMDG, IATA</b>                                                          |                                                                                                                  |
|  |                                                                                                                  |
| · <b>Class</b>                                                                    | 6.1 Toxic substances                                                                                             |
| · <b>Label</b>                                                                    | 6.1                                                                                                              |
| · <b>Packing group</b>                                                            |                                                                                                                  |
| · <b>DOT, ADR, IMDG, IATA</b>                                                     | III                                                                                                              |
| · <b>Environmental hazards:</b>                                                   | Not applicable.                                                                                                  |
| · <b>Special precautions for user</b>                                             | Warning: Toxic substances                                                                                        |
| · <b>Danger code (Kemler):</b>                                                    | 60                                                                                                               |
| · <b>EMS Number:</b>                                                              | F-A,S-A                                                                                                          |
| · <b>Stowage Category</b>                                                         | A                                                                                                                |
| · <b>Stowage Code</b>                                                             | SW2 Clear of living quarters.                                                                                    |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>  | Not applicable.                                                                                                  |
| · <b>Transport/Additional information:</b>                                        |                                                                                                                  |
| · <b>DOT</b>                                                                      |                                                                                                                  |
| · <b>Quantity limitations</b>                                                     | On passenger aircraft/rail: 60 L<br>On cargo aircraft only: 220 L                                                |
| · <b>ADR</b>                                                                      |                                                                                                                  |
| · <b>Excepted quantities (EQ)</b>                                                 | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>IMDG</b>                                                                     |                                                                                                                  |
| · <b>Limited quantities (LQ)</b>                                                  | 5L                                                                                                               |
| · <b>Excepted quantities (EQ)</b>                                                 | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |

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· **UN "Model Regulation":** *UN 2810 TOXIC, LIQUIDS, ORGANIC, N.O.S. (2-HYDROXYETHYL ACRYLATE, BENZOIN METHYL ETHER), 6.1, III*

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
 · **Sara**

· **Section 355 (extremely hazardous substances):**

*None of the ingredients is listed.*

· **Section 313 (Specific toxic chemical listings):**

*None of the ingredients is listed.*

· **TSCA (Toxic Substances Control Act):**

*All ingredients are listed.*

· **TSCA new (21st Century Act) (Substances not listed)**

3524-62-7 *Benzoin Methyl Ether*

142-09-6 *Hexyl methacrylate*

· **Proposition 65**

· **Chemicals known to cause cancer:**

*None of the ingredients is listed.*

· **Chemicals known to cause reproductive toxicity for females:**

*None of the ingredients is listed.*

· **Chemicals known to cause reproductive toxicity for males:**

*None of the ingredients is listed.*

· **Chemicals known to cause developmental toxicity:**

*None of the ingredients is listed.*

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

*None of the ingredients is listed.*

· **TLV (Threshold Limit Value established by ACGIH)**

*None of the ingredients is listed.*

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

*None of the ingredients is listed.*

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05   GHS06   GHS07

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

*Benzoin Methyl Ether*

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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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2-hydroxyethyl acrylate

mequinol

- **Hazard statements**

Combustible liquid.

Toxic if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

- **Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 09/10/2018 / -

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety **Health**

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 3: Acute toxicity – Category 3

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

# Safety Data Sheet

## according to WHS Regulations

Printing date 10.09.2018

Revision: 10.09.2018

### 1 Identification

- **Product identifier**
- **Trade name:** LOWICRYL MONOSTEP K4M POLAR
- **Article number:** 14335
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- ProSciTech Pty Ltd  
11 Carlton Street, Kirwan QLD 4817 Australia  
Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Website: ems.proscitech.com
- Emgrid Australia Pty. Ltd.  
P.O. Box 118  
The Patch VIC 3792  
Australia  
Tel: 03 9752 1785  
Fax: 03 9752 1784  
Website: www.emgrid.com.au
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Hazard(s) Identification

- **Classification of the substance or mixture**



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

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Flam. Liq. 4 H227 Combustible liquid.

· **Label elements**· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).· **Hazard pictograms**

GHS05 GHS06 GHS07

· **Signal word** Danger· **Hazard-determining components of labelling:**

Benzoin Methyl Ether  
2-hydroxyethyl acrylate  
mequinol

· **Hazard statements**

Combustible liquid.  
Toxic if swallowed.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.

· **Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.  
Do not breathe dusts or mists.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
Specific treatment (see on this label).  
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.  
In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

### 3 Composition and Information on Ingredients

· **Chemical characterisation:** Mixtures· **Description:** Mixture of substances listed below with nonhazardous additions.· **Dangerous components:**

|           |                      |          |
|-----------|----------------------|----------|
| 3524-62-7 | Benzoin Methyl Ether | >25-≤50% |
|-----------|----------------------|----------|

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|            |                                                   |           |
|------------|---------------------------------------------------|-----------|
| 27813-02-1 | methacrylic acid, monoester with propane-1,2-diol | >10-≤25%  |
| 818-61-1   | 2-hydroxyethyl acrylate                           | >2.5-≤10% |
| 142-09-6   | Hexyl methacrylate                                | >2.5-≤10% |
| 150-76-5   | mequinol                                          | ≤2.5%     |

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### 4 First Aid Measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**

Do not induce vomiting; call for medical help immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Fire Fighting Measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:** No special measures required.

### 6 Accidental Release Measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **Reference to other sections**

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and Storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls and personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

#### 150-76-5 mequinol

|     |                                             |
|-----|---------------------------------------------|
| NES | Long-term value: 5 mg/m <sup>3</sup><br>Sen |
| WES | Long-term value: 5 mg/m <sup>3</sup><br>Sen |

- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

## 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Liquid  
**Colour:** Colourless

- **Odour:** Strong

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

**Melting point/freezing point:** Undetermined.  
**Initial boiling point and boiling range:** 246 °C

- **Flash point:** 90 °C

- **Flammability (solid, gas):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Not determined.

- **Explosion limits:**

**Lower:** Not determined.  
**Upper:** Not determined.

- **Vapour pressure:** Not determined.

- **Density:** Not determined.

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

- **Partition coefficient: n-octanol/water:** Not determined.

- **Viscosity:**

**Dynamic:** Not determined.  
**Kinematic:** Not determined.

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|                                              |                                            |
|----------------------------------------------|--------------------------------------------|
| · <b>Solvent content:</b><br><b>VOC (EC)</b> | 0.00 %                                     |
| · <b>Solids content:</b>                     | 0.0 %                                      |
| · <b>Other information</b>                   | No further relevant information available. |

### 10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** Strong caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation** Sensitisation possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Toxic  
Harmful  
Corrosive  
Irritant  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### 12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.

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*Must not reach sewage water or drainage ditch undiluted or unneutralised.*

*Danger to drinking water if even small quantities leak into the ground.*

*Also poisonous for fish and plankton in water bodies.*

*Toxic for aquatic organisms*

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

*Must not be disposed together with household garbage. Do not allow product to reach sewage system.*

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

· **UN-Number**

· **ADG, IMDG, IATA**

UN2810

· **UN proper shipping name**

· **ADG**

2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)

· **IMDG, IATA**

TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)

· **Transport hazard class(es)**

· **ADG, IMDG, IATA**



· **Class**

6.1 Toxic substances.

· **Label**

6.1

· **Packing group**

· **ADG, IMDG, IATA**

III

· **Environmental hazards:**

Not applicable.

· **Special precautions for user**

Warning: Toxic substances.

· **Danger code (Kemler):**

60

· **EMS Number:**

F-A,S-A

· **Stowage Category**

A

· **Stowage Code**

SW2 Clear of living quarters.

· **Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

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· **Transport/Additional information:**

· **ADG**

· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **Transport category**

2

· **Tunnel restriction code**

E

· **IMDG**

· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**

UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-HYDROXYETHYL ACRYLATE, BENZOIN METHYL ETHER), 6.1, III

### 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Australian Inventory of Chemical Substances**

|            |                                                   |
|------------|---------------------------------------------------|
| 109-16-0   | Triethylene glycol dimethacrylate                 |
| 27813-02-1 | methacrylic acid, monoester with propane-1,2-diol |
| 818-61-1   | 2-hydroxyethyl acrylate                           |
| 142-09-6   | Hexyl methacrylate                                |
| 150-76-5   | mequinol                                          |

· **Standard for the Uniform Scheduling of Medicines and Poisons**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS05   GHS06   GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**

Benzoin Methyl Ether

2-hydroxyethyl acrylate

mequinol

· **Hazard statements**

Combustible liquid.

Toxic if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

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# Safety Data Sheet

## according to WHS Regulations

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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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· **Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Specific treatment (see on this label).

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **Seveso category H2** ACUTE TOXIC

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 3: Acute toxicity – Category 3

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/10/2018

Reviewed on 09/10/2018

## 1 Identification

- **Product identifier**
- **Trade name:** LOWICRYL MONOSTEP K4M POLAR
- **Article number:** 14335
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Toxicity (Oral) - Category 3 H301 Toxic if swallowed.



GHS05 Corrosion

Skin Corrosion - Category 1B H314 Causes severe skin burns and eye damage.

Serious Eye Damage - Category 1 H318 Causes serious eye damage.



GHS07

Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.

Flammable Liquids - Category 4 H227 Combustible liquid.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05



GHS06



GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
Benzoin Methyl Ether  
2-hydroxyethyl acrylate

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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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mequinol

· **Hazard statements**

Combustible liquid.

Toxic if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

· **Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

Store in a well-ventilated place.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 3

Fire = 2

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 3

Fire = 2

Reactivity = 0

## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**· **Description:** Mixture of the substances listed below with nonhazardous additions.· **Dangerous components:**

|            |                                                   |              |
|------------|---------------------------------------------------|--------------|
| 3524-62-7  | Benzoin Methyl Ether                              | 15-40% w/w * |
| 27813-02-1 | methacrylic acid, monoester with propane-1,2-diol | 10-30% w/w * |
| 818-61-1   | 2-hydroxyethyl acrylate                           | 5-10% w/w *  |
| 142-09-6   | Hexyl methacrylate                                | 3-7% w/w *   |
| 150-76-5   | mequinol                                          | 1-5% w/w *   |

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\* Actual concentration ranges are withheld as a trade secret.

### 4 First-aid measures

- **Description of first aid measures**

- **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

In case of irregular breathing or respiratory arrest provide artificial respiration.

- **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**

Do not induce vomiting; immediately call for medical help.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **Special hazards arising from the substance or mixture** No further relevant information available.

- **Advice for firefighters**

- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**150-76-5 mequinol**

EL Long-term value: 5 mg/m<sup>3</sup>

EV Long-term value: 5 mg/m<sup>3</sup>

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Tightly sealed goggles

## 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

|                 |                 |
|-----------------|-----------------|
| Form:           | Liquid          |
| Color:          | Colorless       |
| Odor:           | Strong          |
| Odor threshold: | Not determined. |

· pH-value: Not determined.

· Change in condition

|                              |               |
|------------------------------|---------------|
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | 246 °C        |

· Flash point: 90 °C

· Flammability (solid, gaseous): Not flammable.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

· Explosion limits:

|        |                 |
|--------|-----------------|
| Lower: | Not determined. |
| Upper: | Not determined. |

· Vapor pressure: Not determined.

· Density: Not determined.

· Relative density: Not determined.

· Vapor density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

|            |                 |
|------------|-----------------|
| Dynamic:   | Not determined. |
| Kinematic: | Not determined. |

· Solvent content:

Solids content: 0.0 %

· Other information: No further relevant information available.

CA

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Reviewed on 09/10/2018

Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Toxic  
Harmful  
Corrosive  
Irritant  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Must not reach bodies of water or drainage ditch undiluted or unneutralized.  
Danger to drinking water if even small quantities leak into the ground.

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Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

· **UN-Number**

· **DOT, TDG, IMDG, IATA**

UN2810

· **UN proper shipping name**

· **DOT**

Toxic, liquids, organic, n.o.s. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)

· **TDG**

2810 Toxic, liquids, organic, n.o.s. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)

· **IMDG, IATA**

TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)

· **Transport hazard class(es)**

· **DOT**



· **Class**

6.1 Toxic substances

· **Label**

6.1

· **TDG, IMDG, IATA**



· **Class**

6.1 Toxic substances

· **Label**

6.1

· **Packing group**

· **DOT, TDG, IMDG, IATA**

III

· **Environmental hazards:**

Not applicable.

· **Special precautions for user**

Warning: Toxic substances

· **Danger code (Kemler):**

60

· **EMS Number:**

F-A,S-A

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# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/10/2018

Reviewed on 09/10/2018

Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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|                                                                                  |                                                                                                                  |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| · <b>Stowage Category</b>                                                        | A                                                                                                                |
| · <b>Stowage Code</b>                                                            | SW2 Clear of living quarters.                                                                                    |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                                                                                  |
| · <b>Transport/Additional information:</b>                                       |                                                                                                                  |
| · <b>DOT</b>                                                                     |                                                                                                                  |
| · <b>Quantity limitations</b>                                                    | On passenger aircraft/rail: 60 L<br>On cargo aircraft only: 220 L                                                |
| · <b>TDG</b>                                                                     |                                                                                                                  |
| · <b>Excepted quantities (EQ)</b>                                                | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>IMDG</b>                                                                    |                                                                                                                  |
| · <b>Limited quantities (LQ)</b>                                                 | 5L                                                                                                               |
| · <b>Excepted quantities (EQ)</b>                                                | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>UN "Model Regulation":</b>                                                  | UN 2810 TOXIC, LIQUIDS, ORGANIC, N.O.S. (2-HYDROXYETHYL ACRYLATE, BENZOIN METHYL ETHER), 6.1, III                |

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

### · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

### · Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

### · TSCA (Toxic Substances Control Act):

All ingredients are listed.

### · Canadian substance listings:

#### · Canadian Domestic Substances List (DSL)

|            |                                                   |
|------------|---------------------------------------------------|
| 109-16-0   | Triethylene glycol dimethacrylate                 |
| 27813-02-1 | methacrylic acid, monoester with propane-1,2-diol |
| 818-61-1   | 2-hydroxyethyl acrylate                           |
| 142-09-6   | Hexyl methacrylate                                |
| 150-76-5   | mequinol                                          |

### · Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

### · Canadian Ingredient Disclosure list (limit 1%)

|          |                                   |
|----------|-----------------------------------|
| 109-16-0 | Triethylene glycol dimethacrylate |
| 818-61-1 | 2-hydroxyethyl acrylate           |
| 142-09-6 | Hexyl methacrylate                |

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# Safety Data Sheet

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Reviewed on 09/10/2018

Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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150-76-5 mequinol

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05    GHS06    GHS07

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**  
Benzoin Methyl Ether  
2-hydroxyethyl acrylate  
mequinol
- **Hazard statements**  
Combustible liquid.  
Toxic if swallowed.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.
- **Precautionary statements**  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If swallowed: Immediately call a poison center/doctor.  
Specific treatment (see on this label).  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Take off contaminated clothing and wash it before reuse.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.  
In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.  
Store in a well-ventilated place.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of the latest revision of the safety data sheet** 09/10/2018 / -
- **Abbreviations and acronyms:**  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)

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CA

**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 09/10/2018

Reviewed on 09/10/2018

**Trade name: LOWICRYL MONOSTEP K4M POLAR**

NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

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CA

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 10.09.2018

Revision: 10.09.2018

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** LOWICRYL MONOSTEP K4M POLAR
- **Article number:** 14335
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05



GHS06

- **Signal word** *Danger*

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# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 10.09.2018

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**Trade name: LOWICRYL MONOSTEP K4M POLAR**

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**· Hazard-determining components of labelling:**

Benzoin Methyl Ether  
2-hydroxyethyl acrylate  
mequinol

**· Hazard statements**

H301 Toxic if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.

**· Precautionary statements**

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P321 Specific treatment (see on this label).  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· 2.3 Other hazards****· Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

**· 3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

**· Dangerous components:**

|                                      |                                                                                                                       |           |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 3524-62-7<br>EINECS: 222-538-7  | Benzoin Methyl Ether<br>⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319           | >25-≤50%  |
| CAS: 27813-02-1<br>EINECS: 248-666-3 | methacrylic acid, monoester with propane-1,2-diol<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319                        | >10-≤25%  |
| CAS: 818-61-1<br>EINECS: 212-454-9   | 2-hydroxyethyl acrylate<br>⚠ Acute Tox. 3, H311; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; ⚠ Skin Sens. 1, H317 | >2.5-≤10% |
| CAS: 150-76-5<br>EINECS: 205-769-8   | mequinol<br>⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317                                              | ≤2.5%     |

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

**· 4.1 Description of first aid measures****· General information:**

Immediately remove any clothing soiled by the product.  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.  
In case of irregular breathing or respiratory arrest provide artificial respiration.

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# Safety data sheet

## according to 1907/2006/EC, Article 31

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**Trade name: LOWICRYL MONOSTEP K4M POLAR**

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- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Do not induce vomiting; call for medical help immediately.  
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralising agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

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# Safety data sheet

## according to 1907/2006/EC, Article 31

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· 7.3 **Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.· **8.1 Control parameters**· **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional information:** The lists valid during the making were used as basis.· **8.2 Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:****Form:**

Liquid

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**Safety data sheet**  
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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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|                                                  |                                            |
|--------------------------------------------------|--------------------------------------------|
| · <b>Colour:</b>                                 | Colourless                                 |
| · <b>Odour:</b>                                  | Strong                                     |
| · <b>Odour threshold:</b>                        | Not determined.                            |
| · <b>pH-value:</b>                               | Not determined.                            |
| · <b>Change in condition</b>                     |                                            |
| <b>Melting point/freezing point:</b>             | Undetermined.                              |
| <b>Initial boiling point and boiling range:</b>  | 246 °C                                     |
| · <b>Flash point:</b>                            | 90 °C                                      |
| · <b>Flammability (solid, gas):</b>              | Not applicable.                            |
| · <b>Decomposition temperature:</b>              | Not determined.                            |
| · <b>Auto-ignition temperature:</b>              | Product is not selfigniting.               |
| · <b>Explosive properties:</b>                   | Not determined.                            |
| · <b>Explosion limits:</b>                       |                                            |
| <b>Lower:</b>                                    | Not determined.                            |
| <b>Upper:</b>                                    | Not determined.                            |
| · <b>Vapour pressure:</b>                        | Not determined.                            |
| · <b>Density:</b>                                | Not determined.                            |
| · <b>Relative density</b>                        | Not determined.                            |
| · <b>Vapour density</b>                          | Not determined.                            |
| · <b>Evaporation rate</b>                        | Not determined.                            |
| · <b>Solubility in / Miscibility with water:</b> | Not miscible or difficult to mix.          |
| · <b>Partition coefficient: n-octanol/water:</b> | Not determined.                            |
| · <b>Viscosity:</b>                              |                                            |
| <b>Dynamic:</b>                                  | Not determined.                            |
| <b>Kinematic:</b>                                | Not determined.                            |
| · <b>Solvent content:</b>                        |                                            |
| <b>VOC (EC)</b>                                  | 0.00 %                                     |
| <b>Solids content:</b>                           | 0.0 %                                      |
| · <b>9.2 Other information</b>                   | No further relevant information available. |

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

GB

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# Safety data sheet

## according to 1907/2006/EC, Article 31

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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
Toxic if swallowed.
- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**  
Causes serious eye damage.
- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.09.2018

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

|                                                                                                                                                            |                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| · <b>14.1 UN-Number</b><br>· <b>ADR, IMDG, IATA</b>                                                                                                        | UN2810                                                                                                                                                              |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR</b><br><br>· <b>IMDG, IATA</b>                                                                           | 2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)<br>TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether) |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, IMDG, IATA</b>                                                                                       |                                                                                                                                                                     |
|                                                                           |                                                                                                                                                                     |
| · <b>Class</b><br>· <b>Label</b>                                                                                                                           | 6.1 Toxic substances.<br>6.1                                                                                                                                        |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                                                                                    | III                                                                                                                                                                 |
| · <b>14.5 Environmental hazards:</b>                                                                                                                       | Not applicable.                                                                                                                                                     |
| · <b>14.6 Special precautions for user</b><br>· <b>Danger code (Kemler):</b><br>· <b>EMS Number:</b><br>· <b>Stowage Category</b><br>· <b>Stowage Code</b> | Warning: Toxic substances.<br>60<br>F-A,S-A<br>A<br>SW2 Clear of living quarters.                                                                                   |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>                                                                           | Not applicable.                                                                                                                                                     |
| · <b>Transport/Additional information:</b>                                                                                                                 |                                                                                                                                                                     |
| · <b>ADR</b><br>· <b>Limited quantities (LQ)</b><br>· <b>Excepted quantities (EQ)</b>                                                                      | 5L<br>Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml                                              |
| · <b>Transport category</b><br>· <b>Tunnel restriction code</b>                                                                                            | 2<br>E                                                                                                                                                              |
| · <b>IMDG</b><br>· <b>Limited quantities (LQ)</b><br>· <b>Excepted quantities (EQ)</b>                                                                     | 5L<br>Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml                                              |

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# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 10.09.2018

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Trade name: **LOWICRYL MONOSTEP K4M POLAR**

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|                                 |                                                                                                 |
|---------------------------------|-------------------------------------------------------------------------------------------------|
| · <b>UN "Model Regulation":</b> | UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-HYDROXYETHYL ACRYLATE, BENZOIN METHYL ETHER), 6.1, III |
|---------------------------------|-------------------------------------------------------------------------------------------------|

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- Directive 2012/18/EU
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category H2** ACUTE TOXIC
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Relevant phrases**
  - H301 Toxic if swallowed.
  - H302 Harmful if swallowed.
  - H311 Toxic in contact with skin.
  - H314 Causes severe skin burns and eye damage.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.
  - H400 Very toxic to aquatic life.
- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - VOC: Volatile Organic Compounds (USA, EU)
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Acute Tox. 3: Acute toxicity – Category 3
  - Acute Tox. 4: Acute toxicity – Category 4
  - Skin Corr. 1B: Skin corrosion/irritation – Category 1B
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  - Skin Sens. 1: Skin sensitisation – Category 1
  - Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1



# Bezpečnostní list podle 1907/2006/ES, Článek 31

Datum vydání: 10.09.2018

Revize: 10.09.2018

## ODDÍL 1: Identifikace látky/směsi a společnosti/podniku

- **1.1 Identifikátor výrobku**
- **Obchodní označení:** LOWICRYL MONOSTEP K4M POLAR
- **Číslo výrobku:** 14335
- **1.2 Příslušná určená použití látky nebo směsi a nedoporučená použití**  
Další relevantní informace nejsou k dispozici.
- **Použití látky / přípravku** Laboratorní chemikálie
- **1.3 Podrobné údaje o dodavateli bezpečnostního listu**
- **Identifikace výrobce/dovozce:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Obor poskytující informace:** Product safety department
- **1.4 Telefonní číslo pro naléhavé situace:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## ODDÍL 2: Identifikace nebezpečnosti

- **2.1 Klasifikace látky nebo směsi**
- **Klasifikace v souladu s nařízením (ES) č. 1272/2008**



GHS06 lebka se zkříženými hnáty

Acute Tox. 3 H301 Toxický při požití.



GHS05 korozivita

Skin Corr. 1B H314 Způsobuje těžké poleptání kůže a poškození očí.

Eye Dam. 1 H318 Způsobuje vážné poškození očí.



GHS07

Skin Sens. 1 H317 Může vyvolat alergickou kožní reakci.

- **2.2 Prvky označení**
- **Označování v souladu s nařízením (ES) č. 1272/2008** Produkt je klasifikován a označen podle nařízení CLP.
- **Výstražné symboly nebezpečnosti**



GHS05



GHS06

- **Signální slovo** Nebezpečí
- **Nebezpečné komponenty k etiketování:**  
Benzoin Methyl Ether

(pokračování na straně 2)



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**Obchodní označení: LOWICRYL MONOSTEP K4M POLAR**

(pokračování strany 1)

2-Hydroxyethyl-akrylát  
mechinol

• **Standardní věty o nebezpečnosti**

H301 Toxický při požití.

H314 Způsobuje těžké poleptání kůže a poškození očí.

H317 Může vyvolat alergickou kožní reakci.

• **Pokyny pro bezpečné zacházení**

P301+P310 **PŘI POŽITÍ:** Okamžitě volejte TOXIKOLOGICKÉ INFORMAČNÍ STŘEDISKO/lékaře.

P321 Odborné ošetření (viz na tomto štítku).

P303+P361+P353 **PŘI STYKU S KŮŽÍ (nebo s vlasy):** Veškeré kontaminované části oděvu okamžitě svlékněte. Opláchněte kůži vodou/osprchujte.

P305+P351+P338 **PŘI ZASAŽENÍ OČÍ:** Několik minut opatrně vyplachujte vodou. Vyjměte kontaktní čočky, jsou-li nasazeny a pokud je lze vyjmout snadno. Pokračujte ve vyplachování.

P362+P364 Kontaminovaný oděv svlékněte a před opětovným použitím vyperte.

P405 Skladujte uzamčené.

P501 Obsah/nádobu likvidujte v souladu s místními/regionálními/národními/mezinárodními předpisy.

• **2.3 Další nebezpečnost**

• **Výsledky posouzení PBT a vPvB**

• **PBT:** Nedá se použít.

• **vPvB:** Nedá se použít.

## ODDÍL 3: Složení/informace o složkách

• **3.2 Chemická charakteristika: Směsi**

• **Popis:** Směs obsahuje následné látky bez nebezpečných příměsí.

• **Výrobek obsahuje tyto nebezpečné látky:**

|                                      |                                                                                                                      |           |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 3524-62-7<br>EINECS: 222-538-7  | Benzoin Methyl Ether<br>☠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319          | >25-≤50%  |
| CAS: 27813-02-1<br>EINECS: 248-666-3 | methacrylic acid, monoester with propane-1,2-diol<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319                       | >10-≤25%  |
| CAS: 818-61-1<br>EINECS: 212-454-9   | 2-Hydroxyethyl-akrylát<br>☠ Acute Tox. 3, H311; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; ⚠ Skin Sens. 1, H317 | >2,5-≤10% |
| CAS: 150-76-5<br>EINECS: 205-769-8   | mechinol<br>⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317                                             | ≤2,5%     |

• **Dodatečná upozornění:** Znění uvedených údajů o nebezpečnosti látky je uvedeno v kapitole 16.

## ODDÍL 4: Pokyny pro první pomoc

• **4.1 Popis první pomoci**

• **Všeobecné pokyny:**

Neprodlleň odstranit části oděvu znečištěné produktem.

Příznaky otravy se mohou projevit až po mnoha hodinách, proto je nutný lékařský dohled nejméně 48 hodin po nehodě.

Při nepravidelném dechu nebo zástavě dechu provést umělé dýchání.

• **Při nadýchání:**

Bohatý přívod čerstvého vzduchu a pro jistotu vyhledat lékaře.

Při bezvědomí uložit a přepravit ve stabilní poloze na boku.

• **Při styku s kůží:** Ihned omýt vodou a mýdlem a dobře opláchnout.

(pokračování na straně 3)

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(pokračování strany 2)

- **Při zasažení očí:** Otevřené oči po více minut oplachovat pod tekoucí vodou a poradit se s lékařem.
- **Při požití:**  
Nepřivodit zvracení, ihned povolat lékařskou pomoc.  
Bohatě zapíjet vodou a dýchat čerstvý vzduch. Neprodleně vyhledat lékaře.
- **4.2 Nejdůležitější akutní a opožděné symptomy a účinky** Další relevantní informace nejsou k dispozici.
- **4.3 Pokyn týkající se okamžité lékařské pomoci a zvláštního ošetření**  
Další relevantní informace nejsou k dispozici.

## ODDÍL 5: Opatření pro hašení požáru

- **5.1 Hasiva**
- **Vhodná hasiva:**  
CO<sub>2</sub>, hasící prášek nebo rozstříkované vodní paprsky. Větší ohně zdolat rozstříkovanými vodními paprsky nebo pěnou odolnou vůči alkoholu.
- **5.2 Zvláštní nebezpečnost vyplývající z látky nebo směsi** Další relevantní informace nejsou k dispozici.
- **5.3 Pokyny pro hasiče**
- **Zvláštní ochranné prostředky pro hasiče:** Nejsou nutná žádná zvláštní opatření.

## ODDÍL 6: Opatření v případě náhodného úniku

- **6.1 Opatření na ochranu osob, ochranné prostředky a nouzové postupy**  
Nosit ochrannou výstroj. Nechráněné osoby se nesmí přibližovat.
- **6.2 Opatření na ochranu životního prostředí:**  
Při vniknutí do kanalizace nebo vodního toku informovat příslušné orgány.  
Nenechat proniknout do kanalizace/povrchových vod/podzemních vod.
- **6.3 Metody a materiál pro omezení úniku a pro čištění:**  
Sebrat s materiály, vážícími kapaliny (písek, šterkový písek, pojidla kyselin, universální pojidla, piliny).  
Použít neutralizační prostředky.  
Kontaminovaný materiál odstranit jako odpad podle bodu 13.  
Zajistit dostatečné větrání.
- **6.4 Odkaz na jiné oddíly**  
Informace o bezpečném zacházení viz kapitola 7.  
Informace o osobní ochranné výstroji viz kapitola 8.  
Informace k odstranění viz kapitola 13.

## ODDÍL 7: Zacházení a skladování

- **7.1 Opatření pro bezpečné zacházení**  
Na pracovišti zabezpečit dobré větrání a odsávání.  
Zamezit vytváření aerosolů.
- **Upozornění k ochraně před ohněm a explozí:** Nejsou nutná žádná zvláštní opatření.
- **7.2 Podmínky pro bezpečné skladování látek a směsí včetně neslučitelných látek a směsí**
- **Pokyny pro skladování:**
- **Požadavky na skladovací prostory a nádoby:** Žádné zvláštní požadavky.
- **Upozornění k hromadnému skladování:** Není nutné.
- **Další údaje k podmínkám skladování:** Nádrž držet neprodyšně uzavřenou.
- **7.3 Specifické konečné / specifická konečná použití** Další relevantní informace nejsou k dispozici.

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(pokračování na straně 4)

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## ODDÍL 8: Omezování expozice / osobní ochranné prostředky

- **Technická opatření:** Žádné další údaje, viz bod 7.
- **8.1 Kontrolní parametry**
- **Kontrolní parametry:**  
Produkt neobsahuje žádná relevantní množství látek, u kterých se musí kontrolovat hraniční hodnoty na pracovišti.
- **Další upozornění:** Jako podklad sloužily při zhotovení platné listiny.
- **8.2 Omezování expozice**
- **Osobní ochranné prostředky:**
- **Všeobecná ochranná a hygienická opatření:**  
Zdržovat od potravin, nápojů a krmiv.  
Zašpiněné, nasáknuté šaty ihned vysvléci.  
Před přestávkami a po práci umýt ruce.  
Zamezit styku se zrakem.  
Zamezit styku s pokožkou a zrakem.
- **Ochrana dýchacích orgánů:**  
Při krátkodobém nebo nízkém zatížení použít dýchací přístroj s filtrem, při intenzivním nebo delším zatížení se musí použít dýchací přístroj nezávislý na okolním vzduchu.
- **Ochrana rukou:**



Ochranné rukavice

Materiál rukavic musí být nepropustný a odolný proti produktu / látce / směsi.  
Vzhledem k tomu, že chybí testy, není možné doporučit materiál rukavic pro produkt / přípravek / chemickou směs.  
Výběr materiálu rukavic proveďte podle času průniku, permeability a degradace.

- **Materiál rukavic**  
Správný výběr rukavic nezávisí jen na materiálu, ale také na dalších kritériích, která se liší podle výrobce. Protože je výrobek směs více látek, nelze materiál rukavic předem vypočítat a je nutno udělat před použitím zkoušku.
- **Doba průniku materiálem rukavic**  
Je nutno u výrobce rukavic zjistit a dodržovat přesné časy průniku materiálem ochranných rukavic.
- **Ochrana očí:**



Uzavřené ochranné brýle

## ODDÍL 9: Fyzikální a chemické vlastnosti

- **9.1 Informace o základních fyzikálních a chemických vlastnostech**
- **Všeobecné údaje**
- **Vzhled:**

|             |          |
|-------------|----------|
| Skupenství: | Tekutina |
| Barva:      | Bezbarvá |
- **Zápach:** Silný
- **Prahová hodnota zápachu:** Není určeno.
- **Hodnota pH:** Není určeno.

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(pokračování strany 4)

|                                                                                                           |                                                              |
|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| · <b>Změna stavu</b><br><b>Bod tání/bod tuhnutí:</b><br><b>Počáteční bod varu a rozmezí bodu varu:</b>    | Není určeno.<br>246 °C                                       |
| · <b>Bod vzplanutí:</b>                                                                                   | 90 °C                                                        |
| · <b>Hořlavost (pevné látky, plyny):</b>                                                                  | Nedá se použít.                                              |
| · <b>Teplota rozkladu:</b>                                                                                | Není určeno.                                                 |
| · <b>Teplota samovznícení:</b>                                                                            | Produkt není samozápalný.                                    |
| · <b>Výbušné vlastnosti:</b>                                                                              | Není určeno.                                                 |
| · <b>Meze výbušnosti:</b><br><b>Dolní mez:</b><br><b>Horní mez:</b>                                       | Není určeno.<br>Není určeno.                                 |
| · <b>Tlak páry:</b>                                                                                       | Není určeno.                                                 |
| · <b>Hustota:</b><br>· <b>Relativní hustota</b><br>· <b>Hustota páry:</b><br>· <b>Rychlost odpařování</b> | Není určeno.<br>Není určeno.<br>Není určeno.<br>Není určeno. |
| · <b>Rozpuštěnost ve / směšitelnost s vodě:</b>                                                           | Vůbec nemísitelná nebo jen málo mísitelná.                   |
| · <b>Rozdělovací koeficient: n-oktanol/voda:</b>                                                          | Není určeno.                                                 |
| · <b>Viskozita:</b><br><b>Dynamicky:</b><br><b>Kinematicky:</b>                                           | Není určeno.<br>Není určeno.                                 |
| · <b>Obsah ředidel:</b><br><b>VOC (EC)</b>                                                                | 0,00 %                                                       |
| <b>Obsah netěkavých složek:</b><br>· <b>9.2 Další informace</b>                                           | 0,0 %<br>Další relevantní informace nejsou k dispozici.      |

## ODDÍL 10: Stálost a reaktivita

- **10.1 Reaktivita** Další relevantní informace nejsou k dispozici.
- **10.2 Chemická stabilita**
- **Termický rozklad / Podmínky, kterých je nutno se vyvarovat:**  
Nedochází k rozkladu při doporučeném způsobu použití.
- **10.3 Možnost nebezpečných reakcí** Žádné nebezpečné reakce nejsou známy.
- **10.4 Podmínky, kterým je třeba zabránit** Další relevantní informace nejsou k dispozici.
- **10.5 Neslučitelné materiály:** Další relevantní informace nejsou k dispozici.
- **10.6 Nebezpečné produkty rozkladu:** Nejsou známy žádné nebezpečné produkty při rozkladu.

## ODDÍL 11: Toxikologické informace

- **11.1 Informace o toxikologických účincích**
- **Akutní toxicita**  
Toxický při požití.

(pokračování na straně 6)

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(pokračování strany 5)

- **Primární dráždivé účinky:**
- **Žíravost/dráždivost pro kůži**  
Způsobuje těžké poleptání kůže a poškození očí.
- **Vážné poškození očí / podráždění očí**  
Způsobuje vážné poškození očí.
- **Senzibilizace dýchacích cest / senzibilizace kůže**  
Může vyvolat alergickou kožní reakci.
- **Účinky CMR (karcinogenita, mutagenita a toxicita pro reprodukci)**
- **Mutagenita v zárodečných buňkách** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Karcinogenita** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Toxicita pro reprodukci** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Toxicita pro specifické cílové orgány – jednorázová expozice**  
Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Toxicita pro specifické cílové orgány – opakovaná expozice**  
Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.
- **Nebezpečnost při vdechnutí** Na základě dostupných údajů nejsou kritéria pro klasifikaci splněna.

## ODDÍL 12: Ekologické informace

- **12.1 Toxicita**
- **Aquatická toxicita:** Další relevantní informace nejsou k dispozici.
- **12.2 Perzistence a rozložitelnost** Další relevantní informace nejsou k dispozici.
- **12.3 Bioakumulační potenciál** Další relevantní informace nejsou k dispozici.
- **12.4 Mobilita v půdě** Další relevantní informace nejsou k dispozici.
- **Ekotoxické účinky:**
- **Poznámka:** Jedovatý pro ryby.
- **Další ekologické údaje:**
- **Všeobecná upozornění:**  
Třída ohrožení vody 2 (Samozařazení): ohrožuje vodu  
Nesmí vniknout do spodní vody, povodí nebo kanalizace.  
Nesmí nezředěno nebo nezneutralizováno proniknout do odpadních vod nebo jímek.  
Ohrožuje pitnou vodu už při proniknutí malého množství do zeminy.  
V povodích je také jedovatá pro ryby a plankton.  
jedovatá pro vodní organismy
- **12.5 Výsledky posouzení PBT a vPvB**
- **PBT:** Nedá se použít.
- **vPvB:** Nedá se použít.
- **12.6 Jiné nepříznivé účinky** Další relevantní informace nejsou k dispozici.

## ODDÍL 13: Pokyny pro odstraňování

- **13.1 Metody nakládání s odpady**
- **Doporučení:** Nesmí se odstraňovat společně s odpady z domácnosti. Nepřipustit únik do kanalizace.
- **Kontaminované obaly:**
- **Doporučení:** Odstranění podle příslušných předpisů.

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(pokračování na straně 7)

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(pokračování strany 6)

## ODDÍL 14: Informace pro přepravu

|                                                                                   |                                                                                                                  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| · 14.1 UN číslo                                                                   | UN2810                                                                                                           |
| · ADR, IMDG, IATA                                                                 |                                                                                                                  |
| · 14.2 Oficiální (OSN) pojmenování pro přepravu                                   | 2810 LÁTKA TOXICKÁ, KAPALNÁ, ORGANICKÁ, J.N. (2-Hydroxyethyl-akrylát, Benzoin Methyl Ether)                      |
| · ADR                                                                             |                                                                                                                  |
| · IMDG, IATA                                                                      | TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)                                    |
| · 14.3 Třída/třídy nebezpečnosti pro přepravu                                     |                                                                                                                  |
| · ADR, IMDG, IATA                                                                 |                                                                                                                  |
|  |                                                                                                                  |
| · třída                                                                           | 6.1 Jedovaté látky                                                                                               |
| · Etiketa                                                                         | 6.1                                                                                                              |
| · 14.4 Obalová skupina                                                            |                                                                                                                  |
| · ADR, IMDG, IATA                                                                 | III                                                                                                              |
| · 14.5 Nebezpečnost pro životní prostředí:                                        | Nedá se použít.                                                                                                  |
| · 14.6 Zvláštní bezpečnostní opatření pro uživatele                               | Varování: Jedovaté látky                                                                                         |
| · Kemlerovo číslo:                                                                | 60                                                                                                               |
| · EMS-skupina:                                                                    | F-A,S-A                                                                                                          |
| · Stowage Category                                                                | A                                                                                                                |
| · Stowage Code                                                                    | SW2 Clear of living quarters.                                                                                    |
| · 14.7 Hromadná přeprava podle přílohy II úmluvy MARPOL a předpisu IBC            | Nedá se použít.                                                                                                  |
| · Přeprava/další údaje:                                                           |                                                                                                                  |
| · ADR                                                                             |                                                                                                                  |
| · Omezené množství (LQ)                                                           | 5L                                                                                                               |
| · Vyňatá množství (EQ)                                                            | Kód: E1<br>Nejvyšší čisté množství na vnitřní obal: 30 ml<br>Nejvyšší čisté množství na vnější obal: 1000 ml     |
| · Přepravní kategorie                                                             | 2                                                                                                                |
| · Kód omezení pro tunely:                                                         | E                                                                                                                |
| · IMDG                                                                            |                                                                                                                  |
| · Limited quantities (LQ)                                                         | 5L                                                                                                               |
| · Excepted quantities (EQ)                                                        | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · UN "Model Regulation":                                                          | UN 2810 LÁTKA TOXICKÁ, KAPALNÁ, ORGANICKÁ, J.N. (2-HYDROXYETHYL-AKRYLÁT, BENZOIN METHYL ETHER), 6.1, III         |

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(pokračování na straně 8)

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(pokračování strany 7)

### ODDÍL 15: Informace o předpisech

- **15.1 Předpisy týkající se bezpečnosti, zdraví a životního prostředí/specifické právní předpisy týkající se látky nebo směsi**
- **Rady 2012/18/EU**
- **Nebezpečné látky jmenovitě uvedené - PŘÍLOHA I** Žádná z obsažených látek není na seznamu.
- **Kategorie Seveso H2 AKUTNÍ TOXICITA**
- **Kvalifikační množství (v tunách) při uplatnění požadavků pro podlimitní množství 50 t**
- **Kvalifikační množství (v tunách) při uplatnění požadavků pro nadlimitní množství 200 t**
- **Rady (ES) č. 1907/2006 PŘÍLOHA XVII** Omezující podmínky: 3
- **15.2 Posouzení chemické bezpečnosti:** Posouzení chemické bezpečnosti nebylo provedeno.

### ODDÍL 16: Další informace

Údaje se opírají o dnešní stav našich vědomostí, nepředstavují však záruku vlastností produktu a nevznikají tak žádné smluvní právní vztahy.

- **Relevantní věty**

- H301 Toxický při požití.
- H302 Zdraví škodlivý při požití.
- H311 Toxický při styku s kůží.
- H314 Způsobuje těžké poleptání kůže a poškození očí.
- H315 Dráždí kůži.
- H317 Může vyvolat alergickou kožní reakci.
- H319 Způsobuje vážné podráždění očí.
- H332 Zdraví škodlivý při vdechování.
- H400 Vysoce toxický pro vodní organismy.

- **Zkratky a akronymy:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 3: Akutní toxicita – Kategorie 3
- Acute Tox. 4: Akutní toxicita – Kategorie 4
- Skin Corr. 1B: Žíravost/dráždivost pro kůži – Kategorie 1B
- Skin Irrit. 2: Žíravost/dráždivost pro kůži – Kategorie 2
- Eye Dam. 1: Vážné poškození očí / podráždění očí – Kategorie 1
- Eye Irrit. 2: Vážné poškození očí / podráždění očí – Kategorie 2
- Skin Sens. 1: Senzibilizace kůže – Kategorie 1
- Aquatic Acute 1: Nebezpečnost pro vodní prostředí - akutní nebezpečnost pro vodní prostředí – Kategorie 1



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## PUNKT 1: Identifikation af stoffet/blandingen og af selskabet/virksomheden

- **1.1 Produktidentifikator**
- **Handelsnavn:** LOWICRYL MONOSTEP K4M POLAR
- **Artikelnummer:** 14335
- **1.2 Relevante identificerede anvendelser for stoffet eller blandingen samt anvendelser, der frarådes**  
Der står ingen yderligere, relevante informationer til rådighed.
- **Stoffets/præparatets anvendelse** Laboratoriekemikalier
- **1.3 Nærmere oplysninger om leverandøren af sikkerhedsdatabladet**
- **Producent/leverandør**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **For yderligere information:** Product safety department
- **1.4 Nødtelefon:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## PUNKT 2: Fareidentifikation

- **2.1 Klassificering af stoffet eller blandingen**
- **Klassificering i henhold til forordning (EF) nr. 1272/2008**



GHS06 dødningshoved og korslagte knogler

Acute Tox. 3 H301 Giftig ved indtagelse.



GHS05 ætsning

Skin Corr. 1B H314 Forårsager svære forbrændinger af huden og øjenskader.

Eye Dam. 1 H318 Forårsager alvorlig øjenskade.



GHS07

Skin Sens. 1 H317 Kan forårsage allergisk hudreaktion.

- **2.2 Mærkningselementer**
- **Mærkning i henhold til forordning (EF) nr. 1272/2008**  
Dette produkt er klassificeret og mærket iht. CLP-forordningen.
- **Farepiktogrammer**



GHS05



GHS06

- **Signalord** Fare

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- **Farebestemmende komponent(er) til etikettering:**

Benzoin Methyl Ether  
2-hydroxyethylacrylat  
mequinol

- **Faresætninger**

H301 Giftig ved indtagelse.  
H314 Forårsager svære forbrændinger af huden og øjenskader.  
H317 Kan forårsage allergisk hudreaktion.

- **Sikkerhedssætninger**

P301+P310 I TILFÆLDE AF INDTAGELSE: Ring omgående til en GIFTINFORMATION/læge.  
P321 Særlig behandling (se på denne etiket).  
P303+P361+P353 VED KONTAKT MED HUDEN (eller håret): Alt tilsmudset tøj tages straks af. Skyl/brus huden med vand.  
P305+P351+P338 VED KONTAKT MED ØJNENE: Skyl forsigtigt med vand i flere minutter. Fjern eventuelle kontaktlinser, hvis dette kan gøres let. Fortsæt skylning.  
P362+P364 Alt tilsmudset tøj tages af og vaskes inden genanvendelse.  
P405 Opbevares under lås.  
P501 Bortskaffelse af indholdet/beholderen i henhold til de lokale/regionale/nationale/internationale forskrifter.

- **2.3 Andre farer**

- **Resultater af PBT- og vPvB-vurdering**

- **PBT:** Ikke relevant.
- **vPvB:** Ikke relevant.

### PUNKT 3: Sammensætning af/oplysning om indholdsstoffer

- **3.2 Kemisk betegnelse: Blandinger**

- **Beskrivelse:** Blanding med nedenstående stoffer med ufarlige tilsætningsstoffer.

- **Farlige indholdsstoffer:**

|                                      |                                                                                                                     |           |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 3524-62-7<br>EINECS: 222-538-7  | Benzoin Methyl Ether<br>⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319         | >25-≤50%  |
| CAS: 27813-02-1<br>EINECS: 248-666-3 | methacrylsyre, monoester med propan-1,2-diol<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319                           | >10-≤25%  |
| CAS: 818-61-1<br>EINECS: 212-454-9   | 2-hydroxyethylacrylat<br>⚠ Acute Tox. 3, H311; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; ⚠ Skin Sens. 1, H317 | >2,5-≤10% |
| CAS: 150-76-5<br>EINECS: 205-769-8   | mequinol<br>⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317                                            | ≤2,5%     |

- **Yderligere anvisninger:** Teksten til de anførte farehenvísninger fremgår af kapitel 16.

### PUNKT 4: Førstehjælpsforanstaltninger

- **4.1 Beskrivelse af førstehjælpsforanstaltninger**

- **Generelle anvisninger:**

Tøj, der er forurennet med produktet, skal tages af med det samme.  
Forgiftningssymptomer kan optræde med mange timers forsinkelse, derfor skal lægeovervågningen vare mindst 48 timer efter et uheld.  
I tilfælde af uregelmæssigt åndedræt eller hvis åndedrættet ophører, skal der gives kunstigt åndedræt.

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- **Efter indånding:**  
Rigelig tilførsel af frisk luft. Søg for en sikkerheds skyld læge.  
I tilfælde af bevidstløshed skal den tilskadekomne lægges ned og transporteres i stabilt sideleje.
- **Efter hudkontakt:** Skal omgående vaskes af med vand og sæbe, skyl godt efter.
- **Efter øjenkontakt:** Skyl øjnene med åbent øjenlåg i flere minutter under rindende vand og søg læge.
- **Efter indtagelse:**  
Fremkald ikke opkastning, tilkald straks lægehjælp.  
Drik rigeligt vand og sørg for frisk luft. Tilkald omgående læge.
- **4.2 Vigtigste symptomer og virkninger, både akutte og forsinkede**  
Der står ingen yderligere, relevante informationer til rådighed.
- **4.3 Angivelse af om øjeblikkelig lægehjælp og særlig behandling er nødvendig**  
Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 5: Brandbekæmpelse

- **5.1 Slukningsmidler**
- **Egnede slukningsmidler:**  
CO<sub>2</sub>, slukningspulver eller vandspraystråle. Større brande bekæmpes med vandspraystråle eller alkoholbestandigt skum.
- **5.2 Særlige farer i forbindelse med stoffet eller blandingen**  
Der står ingen yderligere, relevante informationer til rådighed.
- **5.3 Anvisninger for brandmandskab**
- **Særlige værnemidler:** Der kræves ingen særlige forholdsregler.

### PUNKT 6: Forholdsregler over for udslip ved uheld

- **6.1 Personlige sikkerhedsforanstaltninger, personlige værnemidler og nødprocedurer**  
Bær beskyttelsesudstyr. Hold ubeskyttede personer borte.
- **6.2 Miljøbeskyttelsesforanstaltninger:**  
I tilfælde af indtrængen i vandløb eller kloaksystem skal de pågældende myndigheder underrettes.  
Må ikke udledes i kloaksystemet/overfladevand/grundvand.
- **6.3 Metoder og udstyr til inddæmning og oprensning:**  
Opsamles med væskebindende materiale (sand, kiselgur, syrebindemiddel, universalbindemiddel, savsmuld).  
Brug neutraliseringsmiddel.  
Kontamineret materiale skal bortskaffes som affald ifølge punkt 13.  
Sørg for tilstrækkelig udluftning.
- **6.4 Henvisning til andre punkter**  
Information om sikker håndtering se kapitel 7.  
Informationer vedrørende personlige værnemidler se kapitel 8.  
Informationer om bortskaffelse se kapitel 13.

### PUNKT 7: Håndtering og opbevaring

- **7.1 Forholdsregler for sikker håndtering**  
Sørg for god udluftning/udsugning på arbejdspladsen.  
Undgå aerosoldannelse.
- **Anvisninger vedrørende brand- og eksplosionsbeskyttelse:** Der kræves ingen særlige forholdsregler.
- **7.2 Betingelser for sikker opbevaring, herunder eventuel uforenelighed**
- **Opbevaring:**
- **Krav til opbevaringsrum og beholdere:** Ingen særlige krav.
- **Henvisninger vedrørende opbevaring med andre stoffer:** Ikke påkrævet.

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- **Yderligere oplysninger vedrørende opbevaringsbetingelserne:** Hold beholderen tætsluttende lukket.
- **7.3 Særlige anvendelser** Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 8: Eksponeringskontrol/personlige værnemidler

- **Yderligere anvisninger vedrørende udformning af tekniske anlæg:** Ingen yderligere oplysninger, se punkt 7.
- **8.1 Kontrolparametre**

· **Indholdsstoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges:**

#### 818-61-1 2-hydroxyethylacrylat

GV Langtidsværdi: 5 mg/m<sup>3</sup>, 1 ppm  
H

#### 150-76-5 mequinol

GV Langtidsværdi: 5 mg/m<sup>3</sup>

- **Yderligere anvisninger:** Baseret på de lister, der var gældende på tidspunktet for udarbejdelsen.

#### 8.2 Eksponeringskontrol

##### Personlige værnemidler:

##### Generelle forholdsregler vedrørende beskyttelse og hygiejne:

Skal holdes borte fra føde- og drikkevarer og foderstoffer.  
Forurenet, gennemvædet tøj skal det tages af med det samme.  
Vask hænder inden der holdes pause og ved arbejdsophør.  
Undgå kontakt med øjnene.  
Undgå kontakt med øjne og hud.

##### Åndedrætsværn:

Ved kortvarig eller ringe belastning skal der benyttes åndedrætsværn med filter, ved intensiv eller længere eksponering skal der benyttes luftforsynet åndedrætsværn.

##### Håndbeskyttelse:



Beskyttelseshandsker

Handskematerialet skal være uigennemtrængeligt og kunne tåle produktet/stoffet/præparatet.

På grund af manglende tests kan der ikke anbefales noget handskemateriale til produktet/præparatet/kemikalieblandingen.

Ved valg af handskematerialet skal der tages højde for gennemtrængningstider, permeabilitetstal og nedbrydning.

##### Handskemateriale:

Valg af en egnet handske afhænger ikke blot af materialet, men også af yderligere kvalitetskriterier og er forskelligt fra den ene fabrikant til den anden. Da produktet er et præparat af flere forskellige stoffer, kan handskematerialernes bestandighed ikke beregnes på forhånd og skal derfor efterprøves inden brugen.

##### Handskematerialets gennemtrængningstid

Hos handskefabrikanten skal man forespørge om den nøjagtige gennemtrængningstid og overholde denne.

##### Øjenbeskyttelse:



Tætsluttende beskyttelsesbriller

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## PUNKT 9: Fysiske og kemiske egenskaber

### · 9.1 Oplysninger om grundlæggende fysiske og kemiske egenskaber

#### · Generelle oplysninger

#### · Udseende:

|              |               |
|--------------|---------------|
| Form:        | Væske         |
| Farve:       | Farveløs      |
| Lugt:        | Kraftig       |
| Lugttærskel: | Ikke bestemt. |

· pH-værdi: Ikke bestemt.

#### · Tilstandsændring

|                                             |               |
|---------------------------------------------|---------------|
| Smeltepunkt/frysepunkt:                     | Ikke bestemt. |
| Begyndelseskogepunkt og kogepunktsinterval: | 246 °C        |

· Flammepunkt: 90 °C

· Antændelighed (fast stof, luftart): Ikke relevant.

· Dekomponeringstemperatur: Ikke bestemt.

· Selvantændelsestemperatur: Produktet er ikke selvantændeligt.

· Eksplosive egenskaber: Ikke bestemt.

#### · Eksplosionsgrænser:

|        |               |
|--------|---------------|
| Nedre: | Ikke bestemt. |
| Øvre:  | Ikke bestemt. |

· Damptryk: Ikke bestemt.

· Densitet: Ikke bestemt.

· Relativ massefylde: Ikke bestemt.

· Dampmassefylde: Ikke bestemt.

· Fordampningshastighed: Ikke bestemt.

· Opløselighed i/blandbarhed med vand: Ikke eller kun lidt blandbar.

· Fordelingskoefficient: n-oktanol/vand: Ikke bestemt.

#### · Viskositet:

|             |               |
|-------------|---------------|
| dynamisk:   | Ikke bestemt. |
| kinematisk: | Ikke bestemt. |

#### · Opløsningsmiddelindhold:

VOC (EU) 0,00 %

Tørstofindhold: 0,0 %

· 9.2 Andre oplysninger Der står ingen yderligere, relevante informationer til rådighed.

## PUNKT 10: Stabilitet og reaktivitet

· 10.1 Reaktivitet Der står ingen yderligere, relevante informationer til rådighed.

· 10.2 Kemisk stabilitet

· Termisk nedbrydning/forhold, der bør undgås Ingen nedbrydning ved formålsbestemt brug.

· 10.3 Risiko for farlige reaktioner Der er ikke kendskab til nogen farlige reaktioner.

· 10.4 Forhold, der skal undgås Der står ingen yderligere, relevante informationer til rådighed.

· 10.5 Materialer, der skal undgås: Der står ingen yderligere, relevante informationer til rådighed.

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- **10.6 Farlige nedbrydningsprodukter:** Der er ikke kendskab til nogen farlige nedbrydningsprodukter.

### PUNKT 11: Toksikologiske oplysninger

- **11.1 Oplysninger om toksikologiske virkninger**
- **Akut toksicitet**  
Giftig ved indtagelse.
- **Primær irritationsvirkning:**
- **Hudætsning/-irritation**  
Forårsager svære forbrændinger af huden og øjenskader.
- **Alvorlig øjenskade/øjenirritation**  
Forårsager alvorlig øjenskade.
- **Respiratorisk sensibilisering eller hudsensibilisering**  
Kan forårsage allergisk hudreaktion.
- **CMR-virkninger (kræftfremkaldende egenskaber, mutagenicitet og reproduktionstoksicitet)**
- **Kimcellemutagenicitet**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Kræftfremkaldende egenskaber**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Reproduktionstoksicitet**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Enkel STOT-eksponering**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Gentagne STOT-eksponeringer**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Aspirationsfare**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.

### PUNKT 12: Miljøoplysninger

- **12.1 Toksicitet**
- **Toksicitet i vand:** Der står ingen yderligere, relevante informationer til rådighed.
- **12.2 Persistens og nedbrydelighed** Der står ingen yderligere, relevante informationer til rådighed.
- **12.3 Bioakkumuleringspotentiale** Der står ingen yderligere, relevante informationer til rådighed.
- **12.4 Mobilitet i jord** Der står ingen yderligere, relevante informationer til rådighed.
- **Økotoksicitet**
- **Bemærkning:** Giftig for fisk.
- **Yderligere økologiske oplysninger:**
- **Generelle anvisninger:**  
Fareklasse for vand 2 (Selvklassificering): vandforurenende  
Må ikke udledes i grundvandet, vandløb eller kloaksystemet.  
Må ikke udledes ufortyndet eller unneutraliseret i spildevandet eller recipienten.  
Risiko for forurening af drikkevandet allerede ved udslip af små mængder i undergrunden.  
I vandløb også giftig for fisk og plankton.  
giftig for vandorganismer
- **12.5 Resultater af PBT- og vPvB-vurdering**
- **PBT:** Ikke relevant.
- **vPvB:** Ikke relevant.
- **12.6 Andre negative virkninger** Der står ingen yderligere, relevante informationer til rådighed.

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## PUNKT 13: Bortskaffelse

- **13.1 Metoder til affaldsbehandling**
- **Anbefaling:** Må ikke bortskaffes sammen med husholdningsaffald. Må ikke udledes i kloaksystemet.
- **Urensede emballager:**
- **Anbefaling:** Bortskaffes i overensstemmelse med myndighedernes forskrifter.

## PUNKT 14: Transportoplysninger

- |                                                                                    |                                                                                  |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| · <b>14.1 UN-nummer</b>                                                            | UN2810                                                                           |
| · <b>ADR, IMDG, IATA</b>                                                           |                                                                                  |
| · <b>14.2 UN-forsendelsesbetegnelse (UN proper shipping name)</b>                  | 2810 GIFTIG ORGANISK VÆSKE, N.O.S. (2-hydroxyethylacrylat, Benzoin Methyl Ether) |
| · <b>ADR</b>                                                                       | TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)    |
| · <b>IMDG, IATA</b>                                                                |                                                                                  |
| · <b>14.3 Transportfareklasse(r)</b>                                               |                                                                                  |
| · <b>ADR, IMDG, IATA</b>                                                           |                                                                                  |
|  |                                                                                  |
| · <b>klasse</b>                                                                    | 6.1 Giftige stoffer                                                              |
| · <b>Faremærkat</b>                                                                | 6.1                                                                              |
| · <b>14.4 Emballagegruppe</b>                                                      | III                                                                              |
| · <b>ADR, IMDG, IATA</b>                                                           |                                                                                  |
| · <b>14.5 Miljøfarer:</b>                                                          | Ikke relevant.                                                                   |
| · <b>14.6 Særlige forsigtighedsregler for brugeren</b>                             | Advarsel: Giftige stoffer                                                        |
| · <b>Kemler-tal:</b>                                                               | 60                                                                               |
| · <b>EMS-nummer:</b>                                                               | F-A,S-A                                                                          |
| · <b>Stowage Category</b>                                                          | A                                                                                |
| · <b>Stowage Code</b>                                                              | SW2 Clear of living quarters.                                                    |
| · <b>14.7 Bulktransport i henhold til bilag II til MARPOL og IBC-koden</b>         | Ikke relevant.                                                                   |
| · <b>Transport/yderligere oplysninger:</b>                                         |                                                                                  |
| · <b>ADR</b>                                                                       | 5L                                                                               |
| · <b>Begrænsede mængder (LQ)</b>                                                   | Kode: E1                                                                         |
| · <b>Undtagne mængder (EQ)</b>                                                     | Største tilladte nettomængde pr. indvendig emballage: 30 ml                      |
|                                                                                    | Største tilladte nettomængde pr. ydre emballage: 1000 ml                         |
| · <b>Transportkategori</b>                                                         | 2                                                                                |
| · <b>Tunnelrestriktionskode</b>                                                    | E                                                                                |

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**Handelsnavn: LOWICRYL MONOSTEP K4M POLAR**

(Fortsat fra side 7)

|                                   |                                                                                               |
|-----------------------------------|-----------------------------------------------------------------------------------------------|
| · <b>IMDG</b>                     |                                                                                               |
| · <b>Limited quantities (LQ)</b>  | 5L                                                                                            |
| · <b>Excepted quantities (EQ)</b> | Code: E1                                                                                      |
|                                   | Maximum net quantity per inner packaging: 30 ml                                               |
|                                   | Maximum net quantity per outer packaging: 1000 ml                                             |
| · <b>UN "Model Regulation":</b>   | UN 2810 GIFTIG ORGANISK VÆSKE, N.O.S. (2-HYDROXYETHYLACRYLAT, BENZOIN METHYL ETHER), 6.1, III |

### PUNKT 15: Oplysninger om regulering

- **15.1 Særlige bestemmelser/særlig lovgivning for stoffet eller blandingen med hensyn til sikkerhed, sundhed og miljø**
- **Direktiv 2012/18/EU**
- **Navngivne farlige stoffer - BILAG I** Ingen af indholdsstofferne er optaget i listen.
- **Seveso-bestemmelser H2 AKUT TOKSISK**
- **Tærskelmængde (tons) for anvendelse af Kolonne 2-krav** 50 t
- **Tærskelmængde (tons) for anvendelse af Kolonne 3-krav** 200 t
- **Forordning (EF) nr. 1907/2006 BILAG XVII** Begrænsninger: 3
- **Nationale forskrifter:**
- **MAL-Code:** 5-6
- **15.2 Kemikaliesikkerhedsvurdering:** Der er ikke udført kemikaliesikkerhedsvurdering.

### PUNKT 16: Andre oplysninger

Alle ovenstående angivelser er baseret på vores aktuelle viden, udgør dog ikke nogen tilsikring af produktens egenskaber og stifter heller ikke noget kontraktligt retsforhold.

- **Risikoangivelser**
  - H301 Giftig ved indtagelse.
  - H302 Farlig ved indtagelse.
  - H311 Giftig ved hudkontakt.
  - H314 Forårsager svære forbrændinger af huden og øjenskader.
  - H315 Forårsager hudirritation.
  - H317 Kan forårsage allergisk hudreaktion.
  - H319 Forårsager alvorlig øjenirritation.
  - H332 Farlig ved indånding.
  - H400 Meget giftig for vandlevende organismer.
- **Forkortelser og akronymer:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - VOC: Volatile Organic Compounds (USA, EU)
  - Måleteknisk Arbejdshygiejnisk Luftbehov
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Acute Tox. 3: Akut toksicitet – Kategori 3
  - Acute Tox. 4: Akut toksicitet – Kategori 4

(Fortsættes på side 9)



**Sikkerhedsdatablad**  
**ifølge 1907/2006/EF, Artikel 31**

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*Skin Corr. 1B: Hudætsning/hudirritation – Kategori 1B**Skin Irrit. 2: Hudætsning/hudirritation – Kategori 2**Eye Dam. 1: Alvorlige øjenskader/øjenirritation – Kategori 1**Eye Irrit. 2: Alvorlige øjenskader/øjenirritation – Kategori 2**Skin Sens. 1: Hudsensibilisering – Kategori 1**Aquatic Acute 1: Farlig for vandmiljøet - akut fare for vandmiljøet – Kategori 1*

DK

# Veiligheidsinformatieblad volgens 1907/2006/EG, Artikel 31

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## RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

- **1.1 Productidentificatie**
- **Handelsnaam:** LOWICRYL MONOSTEP K4M POLAR
- **Artikelnummer:** 14335
- **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**  
Geen verdere relevante informatie verkrijgbaar.
- **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën
- **1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad**
- **Fabrikant/leverancier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- Aurion  
Binnenhaven 5  
6709 PD Wageningen  
The Netherlands  
Tel: 31 317 415094  
Fax: 31 317 415955  
email: info@aurion.nl
- **Inlichtingengevende sector:** Product safety department
- **1.4 Telefoonnummer voor noodgevallen:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## RUBRIEK 2: Identificatie van de gevaren

- **2.1 Indeling van de stof of het mengsel**
- **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



GHS06 doodshoofd met gekruiste beenderen

Acute Tox. 3 H301 Giftig bij inslikken.



GHS05 corrosie

Skin Corr. 1B H314 Veroorzaakt ernstige brandwonden en oogletsel.

Eye Dam. 1 H318 Veroorzaakt ernstig oogletsel.



GHS07

Skin Sens. 1 H317 Kan een allergische huidreactie veroorzaken.

- **2.2 Etiketteringselementen**
- **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008**  
Het product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.

(Vervolg op blz. 2)

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(Vervolg van blz. 1)

· **Gevarenpictogrammen**

GHS05 GHS06

· **Signaalwoord** Gevaar· **Gevaaraanduidende componenten voor de etikettering:**

Benzoin Methyl Ether  
2-hydroxyethylacrylaat  
mequinol

· **Gevarenaanduidingen**

H301 Giftig bij inslikken.  
H314 Veroorzaakt ernstige brandwonden en oogletsel.  
H317 Kan een allergische huidreactie veroorzaken.

· **Veiligheidsaanbevelingen**

P301+P310 NA INSLIKKEN: onmiddellijk een ANTIGIFCENTRUM/arts raadplegen.  
P321 Specifieke behandeling vereist (zie op dit etiket).  
P303+P361+P353 BIJ CONTACT MET DE HUID (of het haar): verontreinigde kleding onmiddellijk uittrekken.  
Huid met water afspoelen/afdouchen.  
P305+P351+P338 BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.  
P362+P364 Verontreinigde kleding uittrekken en wassen alvorens deze opnieuw te gebruiken.  
P405 Achter slot bewaren.  
P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.

· **2.3 Andere gevaren**· **Resultaten van PBT- en zPzB-beoordeling**

- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.

## RUBRIEK 3: Samenstelling en informatie over de bestanddelen

· **3.2 Chemische karakterisering: Mengsels**

· **Beschrijving:** Mengsel van na elkaar aangevoerde stoffen met ongevaarlijke bijmengingen.

· **Gevaarlijke inhoudstoffen:**

|                                      |                                                                                                                      |           |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 3524-62-7<br>EINECS: 222-538-7  | Benzoin Methyl Ether<br>⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319          | >25-≤50%  |
| CAS: 27813-02-1<br>EINECS: 248-666-3 | methacrylzuur, monoester met propaan-1,2-diol<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319                           | >10-≤25%  |
| CAS: 818-61-1<br>EINECS: 212-454-9   | 2-hydroxyethylacrylaat<br>⚠ Acute Tox. 3, H311; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; ⚠ Skin Sens. 1, H317 | >2,5-≤10% |
| CAS: 150-76-5<br>EINECS: 205-769-8   | mequinol<br>⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317                                             | ≤2,5%     |

· **Aanvullende gegevens:**

De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.

(Vervolg op blz. 3)

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## RUBRIEK 4: Eerstehulpmaatregelen

### · 4.1 Beschrijving van de eerstehulpmaatregelen

#### · Algemene informatie:

Verontreinigde kleding onmiddellijk uittrekken.

Het is mogelijk dat vergiftigingssymptomen pas na vele uren optreden. Om deze reden is medische controle gedurende minstens 48 uur na een ongeval noodzakelijk.

Bij onregelmatige ademhaling of ademstilstand kunstmatige ademhaling toepassen.

#### · Na het inademen:

Veel verse lucht toedienen en voor alle zekerheid een arts raadplegen.

Bij bewusteloosheid ligging en vervoer in stabiele zijligging.

#### · Na huidcontact: Onmiddellijk met water en zeep afwassen en goed naspoelen.

#### · Na oogcontact: Ogen met open ooglid een aantal minuten onder stromend water afspoelen en dokter raadplegen.

#### · Na inslikken:

Geen braken teweegbrengen en onmiddellijk medische hulp raadplegen.

Drink zeer veel water en voer verse lucht aan. Onmiddellijk een dokter waarschuwen.

### · 4.2 Belangrijkste acute en uitgestelde symptomen en effecten

Geen verdere relevante informatie verkrijgbaar.

### · 4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling

Geen verdere relevante informatie verkrijgbaar.

## RUBRIEK 5: Brandbestrijdingsmaatregelen

### · 5.1 Blusmiddelen

#### · Geschikte blusmiddelen:

CO<sub>2</sub>, bluspoeder of waterstraal. Grotere brand met waterstraal bestrijden of met schuim, dat tegen alcohol bestand is.

### · 5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt

Geen verdere relevante informatie verkrijgbaar.

### · 5.3 Advies voor brandweerlieden

#### · Speciale beschermende kleding: Geen bijzondere maatregelen nodig.

## RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

### · 6.1 Persoonlijke voorzorgsmaatregelen, beschermde uitrusting en noodprocedures

Beschermende kleding aantrekken. Niet beschermde personen op afstand houden.

### · 6.2 Milieuvoorzorgsmaatregelen:

Bij indringen in afvalwater of riolering moet de bevoegde instantie gewaarschuwd worden.

Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.

### · 6.3 Insluitings- en reinigingsmethoden en -materiaal:

Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.

Neutralisatiemiddel gebruiken.

Besmet materiaal zoals afval volgens punt 13 verwijderen.

Voor voldoende ventilatie zorgen.

### · 6.4 Verwijzing naar andere rubrieken

Informatie inzake veilig gebruik - zie hoofdstuk 7.

Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.

Informatie inzake berging - zie hoofdstuk 13.

NL

(Vervolg op blz. 4)

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### RUBRIEK 7: Hantering en opslag

- **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**  
Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.  
Aërosolvorming vermijden.
- **Informatie m.b.t. brand- en ontplofingsgevaar:** Geen bijzondere maatregelen noodzakelijk.
- **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
- **Opslag:**
- **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.
- **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.
- **Verdere inlichtingen over eisen m.b.t. de opslag:** Tanks ondoordringbaar gesloten houden.
- **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **8.1 Controleparameters**
- **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**  
Het produkt bevat geen relevante hoeveelheden van stoffen, die met betrekking tot de werkplaatsen, qua grenswaarden gecontroleerd moeten worden.
- **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.
- **8.2 Maatregelen ter beheersing van blootstelling**
- **Persoonlijke beschermingsvoorzieningen:**
- **Algemene beschermings- en gezondheidsmaatregelen:**  
Verwijderd houden van eet- en drinkwaren.  
Verontreinigde kleding onmiddellijk uittrekken.  
Vóór de pauze en aan het einde van werktijd handen wassen.  
Aanraking met de ogen vermijden.  
Aanraking met de ogen en de huid vermijden.
- **Ademhalingsbescherming:**  
Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingstoestel gebruiken.
- **Handbescherming:**



Veiligheidshandschoenen

Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.  
Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliën-mengsel afgegeven worden.

Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.

- **Handschoenmateriaal**

De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant. Aangezien het product uit meerdere stoffen is samengesteld, is de duurzaamheid van de handschoenmaterialen niet vooraf berekenbaar en moet derhalve vóór het gebruik worden getest.

- **Doordringingstijd van het handschoenmateriaal**

De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.

(Vervolg op blz. 5)

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· **Oogbescherming:**

Nauw aansluitende veiligheidsbril

### RUBRIEK 9: Fysische en chemische eigenschappen

· **9.1 Informatie over fysische en chemische basiseigenschappen**· **Algemene gegevens**· **Voorkomen:**

|                           |               |
|---------------------------|---------------|
| <b>Vorm:</b>              | Vloeistof     |
| <b>Kleur:</b>             | Kleurloos     |
| <b>Geur:</b>              | Sterk         |
| <b>Geurdrempelwaarde:</b> | Niet bepaald. |

· **pH-waarde:** Niet bepaald.· **Toestandsverandering**

|                                      |               |
|--------------------------------------|---------------|
| <b>Smelt-/vriespunt:</b>             | Niet bepaald. |
| <b>Beginkookpunt en kooktraject:</b> | 246 °C        |

· **Flampunt:** 90 °C· **Ontvlambaarheid (vast, gas):** Niet bruikbaar.· **Ontledingstemperatuur:** Niet bepaald.· **Zelfontbrandingstemperatuur:** Het produkt ontbrandt niet uit zichzelf.· **Ontploffingseigenschappen:** Niet bepaald.· **Ontploffingsgrenzen:**

|                  |               |
|------------------|---------------|
| <b>Onderste:</b> | Niet bepaald. |
| <b>Bovenste:</b> | Niet bepaald. |

· **Dampspanning:** Niet bepaald.**Dichtheid:** Niet bepaald.· **Relatieve dichtheid** Niet bepaald.· **Dampdichtheid** Niet bepaald.· **Verdampingssnelheid** Niet bepaald.· **Oplosbaarheid in/mengbaarheid met****Water:** Niet resp. gering mengbaar.· **Verdelingscoëfficiënt: n-octanol/water:** Niet bepaald.· **Viscositeit**

|                     |               |
|---------------------|---------------|
| <b>Dynamisch:</b>   | Niet bepaald. |
| <b>Kinematisch:</b> | Niet bepaald. |

· **Oplosmiddelgehalte:****VOC (EG)** 0,00 %**Gehalte aan vaste bestanddelen:** 0,0 %· **9.2 Overige informatie** Geen verdere relevante informatie verkrijgbaar.

NL

(Vervolg op blz. 6)

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### RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit** Geen verdere relevante informatie verkrijgbaar.
- **10.2 Chemische stabiliteit**
- **Thermische afbraak / te vermijden omstandigheden:** Geen afbraak bij gebruik volgens voorschrift.
- **10.3 Mogelijke gevaarlijke reacties** Geen gevaarlijke reacties bekend.
- **10.4 Te vermijden omstandigheden** Geen verdere relevante informatie verkrijgbaar.
- **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

### RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit**  
Giftig bij inslikken.
- **Primaire aandoening:**
- **Huidcorrosie/-irritatie**  
Veroorzaakt ernstige brandwonden en oogletsel.
- **Ernstig oogletsel/oogirritatie**  
Veroorzaakt ernstig oogletsel.
- **Sensibilisatie van de luchtwegen/de huid**  
Kan een allergische huidreactie veroorzaken.
- **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**
- **Mutageniteit in geslachtscellen** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Kankerverwekkendheid** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Giftigheid voor de voortplanting** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij eenmalige blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij herhaalde blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Gevaar bij inademing** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

### RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
- **Ecotoxische effecten:**
- **Opmerking:** Giftig voor vissen.
- **Verdere ecologische informatie:**
- **Algemene informatie:**  
Waterbezwaarlijkheid (NL): A(2) vergiftig voor in water levende organismen kan in het aquatische milieu op lange termijn schadelijke effecten veroorzaken  
Gevaar voor water klasse 2 (D) (Zelfclassificatie): gevaar voor water  
Niet lozen in grondwater, in oppervlaktewater of in riolering.  
Mag niet onverdund of niet geneutraliseerd in oppervlaktewater of in afwateringskanaal geloosd worden.  
Gevaar voor drinkwater zelfs bij uitlopen van geringe hoeveelheden in de ondergrond.  
In oppervlaktewater ook giftig voor vissen en plankton.  
giftig voor in het water levende organismen
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.

(Vervolg op blz. 7)



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- 12.6 Andere schadelijke effecten Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 13: Instructies voor verwijdering

- 13.1 Afvalverwerkingsmethoden
- Aanbeveling: Mag niet tesamen met huisvuil gestort worden of in de riolering terecht komen.
- Niet gereinigde verpakkingen:
- Aanbeveling: Afvalverwijdering volgens overheidsbepalingen.

### RUBRIEK 14: Informatie met betrekking tot het vervoer

- |                                                                                     |                                                                                          |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| · 14.1 VN-nummer                                                                    | UN2810                                                                                   |
| · ADR, IMDG, IATA                                                                   |                                                                                          |
| · 14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN               |                                                                                          |
| · ADR                                                                               | 2810 GIFTIGE ORGANISCHE VLOEISTOF, N.E.G. (2-hydroxyethylacrylaat, Benzoin Methyl Ether) |
| · IMDG, IATA                                                                        | TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)            |
| · 14.3 Transportgevarenklasse(n)                                                    |                                                                                          |
| · ADR, IMDG, IATA                                                                   |                                                                                          |
|  |                                                                                          |
| · klasse                                                                            | 6.1 Giftige stoffen                                                                      |
| · Etiket                                                                            | 6.1                                                                                      |
| · 14.4 Verpakkingsgroep:                                                            |                                                                                          |
| · ADR, IMDG, IATA                                                                   | III                                                                                      |
| · 14.5 Milieugevaren:                                                               | Niet bruikbaar.                                                                          |
| · 14.6 Bijzondere voorzorgen voor de gebruiker                                      | Waarschuwing: Giftige stoffen                                                            |
| · Kemler-getal:                                                                     | 60                                                                                       |
| · EMS-nummer:                                                                       | F-A,S-A                                                                                  |
| · Stowage Category                                                                  | A                                                                                        |
| · Stowage Code                                                                      | SW2 Clear of living quarters.                                                            |
| · 14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code          | Niet bruikbaar.                                                                          |
| · Transport/verdere gegevens:                                                       |                                                                                          |
| · ADR                                                                               |                                                                                          |
| · Beperkte hoeveelheden (LQ)                                                        | 5L                                                                                       |
| · Uitgezonderde hoeveelheden (EQ)                                                   | Code: E1                                                                                 |
|                                                                                     | Grootste netto hoeveelheid per binnenverpakking: 30 ml                                   |
|                                                                                     | Grootste netto hoeveelheid per buitenverpakking: 1000 ml                                 |
| · Vervoerscategorie                                                                 | 2                                                                                        |
| · Tunnelbeperkingscode                                                              | E                                                                                        |

(Vervolg op blz. 8)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.09.2018

Herziening van: 10.09.2018

**Handelsnaam: LOWICRYL MONOSTEP K4M POLAR**

(Vervolg van blz. 7)

|                                   |                                                                                                       |
|-----------------------------------|-------------------------------------------------------------------------------------------------------|
| · <b>IMDG</b>                     |                                                                                                       |
| · <b>Limited quantities (LQ)</b>  | 5L                                                                                                    |
| · <b>Excepted quantities (EQ)</b> | Code: E1                                                                                              |
|                                   | Maximum net quantity per inner packaging: 30 ml                                                       |
|                                   | Maximum net quantity per outer packaging: 1000 ml                                                     |
| · <b>VN "Model Regulation":</b>   | UN 2810 GIFTIGE ORGANISCHE VLOEISTOF, N.E.G. (2-HYDROXYETHYLACRYLAAT, BENZOIN METHYL ETHER), 6.1, III |

### RUBRIEK 15: Regelgeving

#### · 15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel

##### · SZW-lijst van kankerverwekkende stoffen

geen der bestanddelen staat op de lijst.

##### · SZW-lijst van mutagene stoffen

geen der bestanddelen staat op de lijst.

##### · NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid

geen der bestanddelen staat op de lijst.

##### · NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling

geen der bestanddelen staat op de lijst.

##### · NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding

geen der bestanddelen staat op de lijst.

##### · Richtlijn 2012/18/EU

· Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I geen der bestanddelen staat op de lijst.

· Seveso-categorie H2 ACUUT TOXISCH

· Drempelwaarde (ton) voor toepassing van voorschriften voor lagedrempelinrichtingen 50 t

· Drempelwaarde (ton) voor toepassing van voorschriften voor hogedrempelinrichtingen 200 t

· Verordening (EG) nr. 1907/2006 BIJLAGE XVII Beperkingsvoorwaarden: 3

##### · Nationale voorschriften:

##### · Gevaarklasse v. water:

Waterbezwaarlijkheid (NL): A(2) vergiftig voor in water levende organismen kan in het aquatische milieu op lange termijn schadelijke effecten veroorzaken

· 15.2 Chemischeveiligheidsbeoordeling: Een chemische veiligheidsbeoordeling is niet uitgevoerd.

### RUBRIEK 16: Overige informatie

Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van produkteigenschappen en vestigen geen contractuele rechtsbetrekking.

##### · Relevante zinnen

H301 Giftig bij inslikken.

H302 Schadelijk bij inslikken.

H311 Giftig bij contact met de huid.

H314 Veroorzaakt ernstige brandwonden en oogletsel.

H315 Veroorzaakt huidirritatie.

H317 Kan een allergische huidreactie veroorzaken.

H319 Veroorzaakt ernstige oogirritatie.

(Vervolg op blz. 9)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

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**Handelsnaam: LOWICRYL MONOSTEP K4M POLAR**

(Vervolg van blz. 8)

*H332 Schadelijk bij inademing.**H400 Zeer giftig voor in het water levende organismen.***Afkortingen en acroniemen:***ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 3: Acute toxiciteit – Categorie 3**Acute Tox. 4: Acute toxiciteit – Categorie 4**Skin Corr. 1B: Huidcorrosie/-irritatie – Categorie 1B**Skin Irrit. 2: Huidcorrosie/-irritatie – Categorie 2**Eye Dam. 1: Ernstig oogletsel/oogirritatie – Categorie 1**Eye Irrit. 2: Ernstig oogletsel/oogirritatie – Categorie 2**Skin Sens. 1: Sensibilisatie van de huid – Categorie 1**Aquatic Acute 1: Gevaar voor het aquatisch milieu - acuut aquatisch gevaar – Categorie 1*

NL

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.09.2018

Révision: 10.09.2018

### RUBRIQUE 1: Identification de la substance/du mélange et de la société/l'entreprise

- **1.1 Identificateur de produit**
- **Nom du produit:** LOWICRYL MONOSTEP K4M POLAR
- **Code du produit:** 14335
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**  
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### RUBRIQUE 2: Identification des dangers

- **2.1 Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008**



GHS06 tête de mort sur deux tibias

Acute Tox. 3 H301 Toxique en cas d'ingestion.



GHS05 corrosion

Skin Corr. 1B H314 Provoque des brûlures de la peau et des lésions oculaires graves.

Eye Dam. 1 H318 Provoque des lésions oculaires graves.



GHS07

Skin Sens. 1 H317 Peut provoquer une allergie cutanée.

- **2.2 Éléments d'étiquetage**
- **Étiquetage selon le règlement (CE) n° 1272/2008** Le produit est classifié et étiqueté selon le règlement CLP.
- **Pictogrammes de danger**



GHS05 GHS06

- **Mention d'avertissement** Danger
- **Composants dangereux déterminants pour l'étiquetage:**  
Benzoin Methyl Ether

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## selon 1907/2006/CE, Article 31

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**Nom du produit: LOWICRYL MONOSTEP K4M POLAR**

(suite de la page 1)

acrylate de 2-hydroxyéthyle

mequinol

**· Mentions de danger**

H301 Toxique en cas d'ingestion.

H314 Provoque des brûlures de la peau et des lésions oculaires graves.

H317 Peut provoquer une allergie cutanée.

**· Conseils de prudence**

P301+P310 EN CAS D'INGESTION: Appeler immédiatement un CENTRE ANTIPOISON/un médecin.

P321 Traitement spécifique (voir sur cette étiquette).

P303+P361+P353 EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux): Enlever immédiatement tous les vêtements contaminés. Rincer la peau à l'eau/Se doucher.

P305+P351+P338 EN CAS DE CONTACT AVEC LES YEUX: rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.

P362+P364 Enlever les vêtements contaminés et les laver avant réutilisation.

P405 Garder sous clef.

P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.

**· 2.3 Autres dangers**
**· Résultats des évaluations PBT et vPvB**
**· PBT:** Non applicable.

**· vPvB:** Non applicable.

### RUBRIQUE 3: Composition/informations sur les composants

**· 3.2 Caractérisation chimique: Mélanges**
**· Description:** Mélange des substances mentionnées à la suite avec des additifs non dangereux.

**· Composants dangereux:**

|                                      |                                                                                                                           |           |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 3524-62-7<br>EINECS: 222-538-7  | Benzoin Methyl Ether<br>⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319               | >25-≤50%  |
| CAS: 27813-02-1<br>EINECS: 248-666-3 | acide méthacrylique, monoester avec propane-1,2-diol<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319                         | >10-≤25%  |
| CAS: 818-61-1<br>EINECS: 212-454-9   | acrylate de 2-hydroxyéthyle<br>⚠ Acute Tox. 3, H311; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; ⚠ Skin Sens. 1, H317 | >2,5-≤10% |
| CAS: 150-76-5<br>EINECS: 205-769-8   | mequinol<br>⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317                                                  | ≤2,5%     |

**· Indications complémentaires:** Pour le libellé des phrases de risque citées, se référer au chapitre 16.

### RUBRIQUE 4: Premiers secours

**· 4.1 Description des premiers secours**
**· Remarques générales:**

Enlever immédiatement les vêtements contaminés par le produit.

Les symptômes d'intoxication peuvent apparaître après de nombreuses heures seulement; une surveillance médicale est donc nécessaire au moins 48 heures après un accident.

Respiration artificielle dans le cas d'une respiration irrégulière ou d'un arrêt respiratoire.

**· Après inhalation:**

Donner de l'air frais en abondance et consulter un médecin pour plus de sécurité.

En cas d'inconscience, coucher et transporter la personne en position latérale stable.

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- **Après contact avec la peau:** Laver immédiatement à l'eau et au savon et bien rincer.
- **Après contact avec les yeux:**  
Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières et consulter un médecin.
- **Après ingestion:**  
Ne pas faire vomir, demander d'urgence une assistance médicale.  
Boire de l'eau en abondance et donner de l'air frais. Consulter immédiatement un médecin.
- **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.
- **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**  
Pas d'autres informations importantes disponibles.

### RUBRIQUE 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:**  
CO<sub>2</sub>, poudre d'extinction ou eau pulvérisée. Combattre les foyers importants avec de l'eau pulvérisée ou de la mousse résistant à l'alcool.
- **5.2 Dangers particuliers résultant de la substance ou du mélange**  
Pas d'autres informations importantes disponibles.
- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** Aucune mesure particulière n'est requise.

### RUBRIQUE 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence**  
Porter un équipement de sécurité. Eloigner les personnes non protégées.
- **6.2 Précautions pour la protection de l'environnement:**  
En cas de pénétration dans les eaux ou les égouts, avertir les autorités compétentes.  
Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.
- **6.3 Méthodes et matériel de confinement et de nettoyage:**  
Recueillir les liquides à l'aide d'un produit absorbant (sable, kieselguhr, neutralisant d'acide, liant universel, sciure).  
Utiliser un neutralisant.  
Evacuer les matériaux contaminés en tant que déchets conformément au point 13.  
Assurer une aération suffisante.
- **6.4 Référence à d'autres rubriques**  
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.  
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.  
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

### RUBRIQUE 7: Manipulation et stockage

- **7.1 Précautions à prendre pour une manipulation sans danger**  
Veiller à une bonne ventilation/aspiration du poste de travail.  
Eviter la formation d'aérosols.
- **Préventions des incendies et des explosions:** Aucune mesure particulière n'est requise.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:** Tenir les emballages hermétiquement fermés.

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 · **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

### RUBRIQUE 8: Contrôles de l'exposition/protection individuelle

 · **Indications complémentaires pour l'agencement des installations techniques:**

Sans autre indication, voir point 7.

 · **8.1 Paramètres de contrôle**

 · **Composants présentant des valeurs-seuil à surveiller par poste de travail:**
**150-76-5 mequinol**

 VME Valeur à long terme: 5 mg/m<sup>3</sup>

 · **Remarques supplémentaires:**

Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.

 · **8.2 Contrôles de l'exposition**

 · **Équipement de protection individuel:**

 · **Mesures générales de protection et d'hygiène:**

Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.

Retirer immédiatement les vêtements souillés ou humectés.

Se laver les mains avant les pauses et en fin de travail.

Éviter tout contact avec les yeux.

Éviter tout contact avec les yeux et avec la peau.

 · **Protection respiratoire:**

En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.

 · **Protection des mains:**


Gants de protection

Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.

À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.

Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.

 · **Matériau des gants**

Le choix de gants appropriés dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.

 · **Temps de pénétration du matériau des gants**

Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

 · **Protection des yeux:**


Lunettes de protection hermétiques

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# Fiche de données de sécurité

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### RUBRIQUE 9: Propriétés physiques et chimiques

|                                                                                  |                                                    |
|----------------------------------------------------------------------------------|----------------------------------------------------|
| · <b>9.1 Informations sur les propriétés physiques et chimiques essentielles</b> |                                                    |
| · <b>Indications générales</b>                                                   |                                                    |
| · <b>Aspect:</b>                                                                 |                                                    |
| <b>Forme:</b>                                                                    | Liquide                                            |
| <b>Couleur:</b>                                                                  | Incolore                                           |
| · <b>Odeur:</b>                                                                  | Forte                                              |
| · <b>Seuil olfactif:</b>                                                         | Non déterminé.                                     |
| · <b>valeur du pH:</b>                                                           | Non déterminé.                                     |
| · <b>Changement d'état</b>                                                       |                                                    |
| <b>Point de fusion/point de congélation:</b>                                     | Non déterminé.                                     |
| <b>Point initial d'ébullition et intervalle d'ébullition:</b>                    | 246 °C                                             |
| · <b>Point d'éclair</b>                                                          | 90 °C                                              |
| · <b>Inflammabilité (solide, gaz):</b>                                           | Non applicable.                                    |
| · <b>Température de décomposition:</b>                                           | Non déterminé.                                     |
| · <b>Température d'auto-inflammabilité:</b>                                      | Le produit ne s'enflamme pas spontanément.         |
| · <b>Propriétés explosives:</b>                                                  | Non déterminé.                                     |
| · <b>Limites d'explosion:</b>                                                    |                                                    |
| <b>Inférieure:</b>                                                               | Non déterminé.                                     |
| <b>Supérieure:</b>                                                               | Non déterminé.                                     |
| · <b>Pression de vapeur:</b>                                                     | Non déterminé.                                     |
| · <b>Densité:</b>                                                                | Non déterminée.                                    |
| · <b>Densité relative</b>                                                        | Non déterminé.                                     |
| · <b>Densité de vapeur:</b>                                                      | Non déterminé.                                     |
| · <b>Taux d'évaporation:</b>                                                     | Non déterminé.                                     |
| · <b>Solubilité dans/miscibilité avec l'eau:</b>                                 | Pas ou peu miscible                                |
| · <b>Coefficient de partage: n-octanol/eau:</b>                                  | Non déterminé.                                     |
| · <b>Viscosité:</b>                                                              |                                                    |
| <b>Dynamique:</b>                                                                | Non déterminé.                                     |
| <b>Cinématique:</b>                                                              | Non déterminé.                                     |
| · <b>Teneur en solvants:</b>                                                     |                                                    |
| <b>VOC (CE)</b>                                                                  | 0,00 %                                             |
| <b>Teneur en substances solides:</b>                                             |                                                    |
|                                                                                  | 0,0 %                                              |
| · <b>9.2 Autres informations</b>                                                 | Pas d'autres informations importantes disponibles. |

### RUBRIQUE 10: Stabilité et réactivité

- **10.1 Réactivité** Pas d'autres informations importantes disponibles.
- **10.2 Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** Pas de décomposition en cas d'usage conforme.
- **10.3 Possibilité de réactions dangereuses** Aucune réaction dangereuse connue.
- **10.4 Conditions à éviter** Pas d'autres informations importantes disponibles.
- **10.5 Matières incompatibles:** Pas d'autres informations importantes disponibles.

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· **10.6 Produits de décomposition dangereux:** Pas de produits de décomposition dangereux connus

### RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë**  
Toxique en cas d'ingestion.
- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**  
Provoque des brûlures de la peau et des lésions oculaires graves.
- **Lésions oculaires graves/irritation oculaire**  
Provoque des lésions oculaires graves.
- **Sensibilisation respiratoire ou cutanée**  
Peut provoquer une allergie cutanée.
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**
- **Mutagenicité sur les cellules germinales**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Cancérogénicité** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité pour la reproduction**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition unique**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition répétée**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Danger par aspiration** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

### RUBRIQUE 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **12.4 Mobilité dans le sol** Pas d'autres informations importantes disponibles.
- **Effets écotoxiques:**
- **Remarque:** Toxique chez les poissons.
- **Autres indications écologiques:**
- **Indications générales:**  
Catégorie de pollution des eaux 2 (D) (Classification propre): polluant  
Ne pas laisser pénétrer dans la nappe phréatique, les eaux ou les canalisations.  
Ne doit pas pénétrer à l'état non dilué ou non neutralisé dans les eaux usées ou le collecteur.  
Danger pour l'eau potable dès fuite d'une petite quantité dans le sous-sol.  
Dans les eaux, également toxique pour les poissons et le plancton.  
Toxique pour les organismes aquatiques.
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

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### RUBRIQUE 13: Considérations relatives à l'élimination

- **13.1 Méthodes de traitement des déchets**
- **Recommandation:** Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.
- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.

### RUBRIQUE 14: Informations relatives au transport

- |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>· <b>14.1 Numéro ONU</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                                                                                                                       | <p style="text-align: center;">UN2810</p>                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>· <b>14.2 Désignation officielle de transport de l'ONU</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>                                                                                    | <p>2810 LIQUIDE ORGANIQUE TOXIQUE, N.S.A.<br/>(acrylate de 2-hydroxyéthyle, Benzoin Methyl Ether)<br/>TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl<br/>acrylate, Benzoin Methyl Ether)</p>                                        |
| <ul style="list-style-type: none"> <li>· <b>14.3 Classe(s) de danger pour le transport</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                                                                                            | <div style="text-align: center;">  </div> <p> <ul style="list-style-type: none"> <li>· <b>Classe</b></li> <li>· <b>Étiquette</b></li> </ul> </p> |
| <ul style="list-style-type: none"> <li>· <b>14.4 Groupe d'emballage</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                                                                                                               | <p>6.1 Matières toxiques.<br/>6.1</p> <p style="text-align: center;">III</p>                                                                                                                                                       |
| <ul style="list-style-type: none"> <li>· <b>14.5 Dangers pour l'environnement:</b></li> </ul>                                                                                                                                                      | <p>Non applicable.</p>                                                                                                                                                                                                             |
| <ul style="list-style-type: none"> <li>· <b>14.6 Précautions particulières à prendre par l'utilisateur</b></li> <li>· <b>Indice Kemler:</b></li> <li>· <b>No EMS:</b></li> <li>· <b>Stowage Category</b></li> <li>· <b>Stowage Code</b></li> </ul> | <p>Attention: Matières toxiques.<br/>60<br/>F-A,S-A<br/>A<br/>SW2 Clear of living quarters.</p>                                                                                                                                    |
| <ul style="list-style-type: none"> <li>· <b>14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC</b></li> </ul>                                                                                             | <p>Non applicable.</p>                                                                                                                                                                                                             |
| <ul style="list-style-type: none"> <li>· <b>Indications complémentaires de transport:</b></li> </ul>                                                                                                                                               |                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>· <b>ADR</b></li> <li>· <b>Quantités limitées (LQ)</b></li> <li>· <b>Quantités exceptées (EQ)</b></li> </ul>                                                                                                | <p>5L<br/>Code: E1<br/>Quantité maximale nette par emballage intérieur: 30 ml<br/>Quantité maximale nette par emballage extérieur: 1000 ml</p>                                                                                     |
| <ul style="list-style-type: none"> <li>· <b>Catégorie de transport</b></li> <li>· <b>Code de restriction en tunnels</b></li> </ul>                                                                                                                 | <p>2<br/>E</p>                                                                                                                                                                                                                     |

(suite page 8)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.09.2018

Révision: 10.09.2018

**Nom du produit: LOWICRYL MONOSTEP K4M POLAR**

(suite de la page 7)

|                                     |                                                                                                                  |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------|
| · <b>IMDG</b>                       |                                                                                                                  |
| · <b>Limited quantities (LQ)</b>    | 5L                                                                                                               |
| · <b>Excepted quantities (EQ)</b>   | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>"Règlement type" de l'ONU:</b> | UN 2810 LIQUIDE ORGANIQUE TOXIQUE, N.S.A.<br>(ACRYLATE DE 2-HYDROXYÉTHYLE, BENZOIN<br>METHYL ETHER), 6.1, III    |

### RUBRIQUE 15: Informations relatives à la réglementation

- **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**
- **Directive 2012/18/UE**
- **Substances dangereuses désignées - ANNEXE I** Aucun des composants n'est compris.
- **Catégorie SEVESO H2 TOXICITÉ AIGÜÈ**
- **Quantité seuil (tonnes) pour l'application des exigences relatives au seuil bas 50 t**
- **Quantité seuil (tonnes) pour l'application des exigences relatives au seuil haut 200 t**
- **RÈGLEMENT (CE) N° 1907/2006 ANNEXE XVII** Conditions de limitation: 3
- **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

### RUBRIQUE 16: Autres informations

Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.

- **Phrases importantes**
- H301 Toxique en cas d'ingestion.
- H302 Nocif en cas d'ingestion.
- H311 Toxique par contact cutané.
- H314 Provoque des brûlures de la peau et des lésions oculaires graves.
- H315 Provoque une irritation cutanée.
- H317 Peut provoquer une allergie cutanée.
- H319 Provoque une sévère irritation des yeux.
- H332 Nocif par inhalation.
- H400 Très toxique pour les organismes aquatiques.
- **Acronymes et abréviations:**
- ADR: Accord européen sur le transport des marchandises dangereuses par Route
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 3: Toxicité aiguë – Catégorie 3
- Acute Tox. 4: Toxicité aiguë – Catégorie 4
- Skin Corr. 1B: Corrosion cutanée/irritation cutanée – Catégorie 1B
- Skin Irrit. 2: Corrosion cutanée/irritation cutanée – Catégorie 2
- Eye Dam. 1: Lésions oculaires graves/irritation oculaire – Catégorie 1
- Eye Irrit. 2: Lésions oculaires graves/irritation oculaire – Catégorie 2
- Skin Sens. 1: Sensibilisation cutanée – Catégorie 1
- Aquatic Acute 1: Dangers pour le milieu aquatique- toxicité aiguë pour le milieu aquatique – Catégorie 1

# Sicherheitsdatenblatt gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.09.2018

überarbeitet am: 10.09.2018

## ABSCHNITT 1: Bezeichnung des Stoffs beziehungsweise des Gemischs und des Unternehmens

- **1.1 Produktidentifikator**
- **Handelsname:** LOWICRYL MONOSTEP K4M POLAR
- **Artikelnummer:** 14335
- **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**  
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffs / des Gemisches** Laborchemikalien
- **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**
- **Hersteller/Lieferant:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com  
  
Science Services GmbH  
Unterhachinger Str. 75  
81737 München Germany  
  
Tel: +49(0)89 18 93 668-0  
safety@scienceservices.de  
  
Deutschland: +49 (0)89 19240, 24h Giftnotruf Munchen, www.toxinfo.org  
Österreich: +43 1406 43 43, Gesundheit Österreich GmbH, 24 h
- **Auskunftgebender Bereich:** Product safety department
- **1.4 Notrufnummer:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## ABSCHNITT 2: Mögliche Gefahren

- **2.1 Einstufung des Stoffs oder Gemischs**
- **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**



GHS06 Totenkopf mit gekreuzten Knochen

Acute Tox. 3 H301 Giftig bei Verschlucken.



GHS05 Ätzwirkung

Skin Corr. 1B H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

Eye Dam. 1 H318 Verursacht schwere Augenschäden.



GHS07

Skin Sens. 1 H317 Kann allergische Hautreaktionen verursachen.

(Fortsetzung auf Seite 2)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

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**Handelsname: LOWICRYL MONOSTEP K4M POLAR**

(Fortsetzung von Seite 1)

### · 2.2 Kennzeichnungselemente

#### · Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008

Das Produkt ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

#### · Gefahrenpiktogramme



GHS05    GHS06

#### · Signalwort Gefahr

#### · Gefahrbestimmende Komponenten zur Etikettierung:

Benzoin Methyl Ether

2-Hydroxyethylacrylat

Mequinol

#### · Gefahrenhinweise

H301 Giftig bei Verschlucken.

H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

H317 Kann allergische Hautreaktionen verursachen.

#### · Sicherheitshinweise

P301+P310 BEI VERSCHLUCKEN: Sofort GIFTINFORMATIONSZENTRUM/Arzt anrufen.

P321 Besondere Behandlung (siehe auf diesem Kennzeichnungsetikett).

P303+P361+P353 BEI BERÜHRUNG MIT DER HAUT (oder dem Haar): Alle kontaminierten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen/duschen.

P305+P351+P338 BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.

P362+P364 Kontaminierte Kleidung ausziehen und vor erneutem Tragen waschen.

P405 Unter Verschluss aufbewahren.

P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.

### · 2.3 Sonstige Gefahren

#### · Ergebnisse der PBT- und vPvB-Beurteilung

· **PBT:** Nicht anwendbar.· **vPvB:** Nicht anwendbar.

## ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

### · 3.2 Chemische Charakterisierung: Gemische

· **Beschreibung:** Gemisch aus nachfolgend angeführten Stoffen mit ungefährlichen Beimengungen.

#### · Gefährliche Inhaltsstoffe:

|                                      |                                                                                                                     |           |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 3524-62-7<br>EINECS: 222-538-7  | Benzoin Methyl Ether<br>☠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319         | >25-≤50%  |
| CAS: 27813-02-1<br>EINECS: 248-666-3 | Hydroxypropylmethacrylat<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319                                               | >10-≤25%  |
| CAS: 818-61-1<br>EINECS: 212-454-9   | 2-Hydroxyethylacrylat<br>☠ Acute Tox. 3, H311; ⚠ Skin Corr. 1B, H314; ☠ Aquatic Acute 1, H400; ⚠ Skin Sens. 1, H317 | >2,5-≤10% |
| CAS: 150-76-5<br>EINECS: 205-769-8   | Mequinol<br>⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317                                            | ≤2,5%     |

(Fortsetzung auf Seite 3)

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· **Zusätzliche Hinweise:** Der Wortlaut der angeführten Gefahrenhinweise ist dem Abschnitt 16 zu entnehmen.

### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

#### · 4.1 Beschreibung der Erste-Hilfe-Maßnahmen

##### · Allgemeine Hinweise:

Mit Produkt verunreinigte Kleidungsstücke unverzüglich entfernen.

Vergiftungssymptome können erst nach vielen Stunden auftreten, deshalb ärztliche Überwachung mindestens 48 Stunden nach einem Unfall.

Bei unregelmäßiger Atmung oder Atemstillstand künstliche Beatmung.

##### · Nach Einatmen:

Reichlich Frischluftzufuhr und sicherheitshalber Arzt aufsuchen.

Bei Bewußtlosigkeit Lagerung und Transport in stabiler Seitenlage.

##### · Nach Hautkontakt: Sofort mit Wasser und Seife abwaschen und gut nachspülen.

##### · Nach Augenkontakt:

Augen bei geöffnetem Lidspalt mehrere Minuten unter fließendem Wasser abspülen und Arzt konsultieren.

##### · Nach Verschlucken:

Kein Erbrechen herbeiführen, sofort Arzthilfe zuziehen.

Reichlich Wasser nachtrinken und Frischluftzufuhr. Unverzüglich Arzt hinzuziehen.

#### · 4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen

Keine weiteren relevanten Informationen verfügbar.

#### · 4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung

Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

#### · 5.1 Löschmittel

##### · Geeignete Löschmittel:

CO<sub>2</sub>, Löschpulver oder Wassersprühstrahl. Größeren Brand mit Wassersprühstrahl oder alkoholbeständigem Schaum bekämpfen.

#### · 5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren

Keine weiteren relevanten Informationen verfügbar.

#### · 5.3 Hinweise für die Brandbekämpfung

##### · Besondere Schutzausrüstung: Keine besonderen Maßnahmen erforderlich.

### ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

#### · 6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren

Schutzausrüstung tragen. Ungeschützte Personen fernhalten.

#### · 6.2 Umweltschutzmaßnahmen:

Bei Eindringen in Gewässer oder Kanalisation zuständige Behörden benachrichtigen.

Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.

#### · 6.3 Methoden und Material für Rückhaltung und Reinigung:

Mit flüssigkeitsbindendem Material (Sand, Kieselgur, Säurebinder, Universalbinder, Sägemehl) aufnehmen.

Neutralisationsmittel anwenden.

Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.

Für ausreichende Lüftung sorgen.

#### · 6.4 Verweis auf andere Abschnitte

Informationen zur sicheren Handhabung siehe Abschnitt 7.

Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.

(Fortsetzung auf Seite 4)



# Sicherheitsdatenblatt

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Informationen zur Entsorgung siehe Abschnitt 13.

### ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung**  
Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.  
Aerosolbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:** Keine besonderen Maßnahmen erforderlich.
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:** Behälter dicht geschlossen halten.
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** -
- **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.

#### · 8.1 Zu überwachende Parameter

- **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**

**109-16-0 Triethylene glycol dimethacrylate**

MAK vgl.Abschn.IV

**818-61-1 2-Hydroxyethylacrylat**

MAK vgl.Abschn.IV

- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.

#### · 8.2 Begrenzung und Überwachung der Exposition

##### · **Persönliche Schutzausrüstung:**

##### · **Allgemeine Schutz- und Hygienemaßnahmen:**

Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.

Besmutzte, getränkte Kleidung sofort ausziehen.

Vor den Pausen und bei Arbeitsende Hände waschen.

Berührung mit den Augen vermeiden.

Berührung mit den Augen und der Haut vermeiden.

##### · **Atemschutz:**

Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition umluftunabhängiges Atemschutzgerät verwenden.

##### · **Handschutz:**



Schutzhandschuhe

Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein. Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.

Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.

(Fortsetzung auf Seite 5)

# Sicherheitsdatenblatt

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(Fortsetzung von Seite 4)

· **Handschuhmaterial**

Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialien nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.

· **Durchdringungszeit des Handschuhmaterials**

Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.

· **Augenschutz:**



Dichtschließende Schutzbrille

### ABSCHNITT 9: Physikalische und chemische Eigenschaften

· **9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**

· **Allgemeine Angaben**

· **Aussehen:**

Form: Flüssigkeit

Farbe: Farblos

· **Geruch:** Stark

· **Geruchsschwelle:** Nicht bestimmt.

· **pH-Wert:** Nicht bestimmt.

· **Zustandsänderung**

Schmelzpunkt/Gefrierpunkt: Nicht bestimmt.

Siedebeginn und Siedebereich: 246 °C

· **Flammpunkt:** 90 °C

· **Entzündbarkeit (fest, gasförmig):** Nicht anwendbar.

· **Zersetzungstemperatur:** Nicht bestimmt.

· **Selbstentzündungstemperatur:** Das Produkt ist nicht selbstentzündlich.

· **Explosive Eigenschaften:** Nicht bestimmt.

· **Explosionsgrenzen:**

Untere: Nicht bestimmt.

Obere: Nicht bestimmt.

· **Dampfdruck:** Nicht bestimmt.

· **Dichte:** Nicht bestimmt.

· **Relative Dichte** Nicht bestimmt.

· **Dampfdichte** Nicht bestimmt.

· **Verdampfungsgeschwindigkeit** Nicht bestimmt.

· **Löslichkeit in / Mischbarkeit mit**

Wasser: Nicht bzw. wenig mischbar.

· **Verteilungskoeffizient: n-Octanol/Wasser:** Nicht bestimmt.

· **Viskosität:**

Dynamisch: Nicht bestimmt.

Kinematisch: Nicht bestimmt.

(Fortsetzung auf Seite 6)

# Sicherheitsdatenblatt

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(Fortsetzung von Seite 5)

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| · <b>Lösemittelgehalt:</b><br><b>VOC (EU)</b> | 0,00 %                                             |
| · <b>Festkörpergehalt:</b>                    | 0,0 %                                              |
| · <b>9.2 Sonstige Angaben</b>                 | Keine weiteren relevanten Informationen verfügbar. |

### ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität** Keine weiteren relevanten Informationen verfügbar.
- **10.2 Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**  
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **10.3 Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.
- **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **10.5 Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **10.6 Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

### ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität**  
Giftig bei Verschlucken.
- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut**  
Verursacht schwere Verätzungen der Haut und schwere Augenschäden.
- **Schwere Augenschädigung/-reizung**  
Verursacht schwere Augenschäden.
- **Sensibilisierung der Atemwege/Haut**  
Kann allergische Hautreaktionen verursachen.
- **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
- **Keimzell-Mutagenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Karzinogenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Reproduktionstoxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei einmaliger Exposition**  
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei wiederholter Exposition**  
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Aspirationsgefahr** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

### ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Ökotoxische Wirkungen:**
- **Bemerkung:** Giftig für Fische.

(Fortsetzung auf Seite 7)

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(Fortsetzung von Seite 6)

- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**  
*Wassergefährdungsklasse 2 (Selbsteinstufung): deutlich wassergefährdend*  
*Nicht in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.*  
*Darf nicht unverdünnt bzw. unneutralisiert ins Abwasser bzw. in den Vorfluter gelangen.*  
*Trinkwassergefährdung bereits beim Auslaufen geringer Mengen in den Untergrund.*  
*In Gewässern auch giftig für Fische und Plankton.*  
*giftig für Wasserorganismen*
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.
- **12.6 Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 13: Hinweise zur Entsorgung

- **13.1 Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.

### ABSCHNITT 14: Angaben zum Transport

- |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                               |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Nummer</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                                                                                                                   | UN2810                                                                                                                                                                                                                        |                           |
| <ul style="list-style-type: none"> <li>· <b>14.2 Ordnungsgemäße UN-Versandbezeichnung</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>                                                                                       | 2810 GIFTIGER ORGANISCHER FLÜSSIGER STOFF,<br>N.A.G. (2-Hydroxyethylacrylat, Benzoin Methyl Ether)<br>TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl<br>acrylate, Benzoin Methyl Ether)                                        |                           |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transportgefahrenklassen</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                                                                                                    | <div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>· <b>Klasse</b></li> <li>· <b>Gefahrzettel</b></li> </ul> | 6.1 Giftige Stoffe<br>6.1 |
| <ul style="list-style-type: none"> <li>· <b>14.4 Verpackungsgruppe</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                                                                                                           | III                                                                                                                                                                                                                           |                           |
| <ul style="list-style-type: none"> <li>· <b>14.5 Umweltgefahren:</b></li> </ul>                                                                                                                                                               | Nicht anwendbar.                                                                                                                                                                                                              |                           |
| <ul style="list-style-type: none"> <li>· <b>14.6 Besondere Vorsichtsmaßnahmen für den Verwender</b></li> <li>· <b>Kemler-Zahl:</b></li> <li>· <b>EMS-Nummer:</b></li> <li>· <b>Stowage Category</b></li> <li>· <b>Stowage Code</b></li> </ul> | Achtung: Giftige Stoffe<br>60<br>F-A,S-A<br>A<br>SW2 Clear of living quarters.                                                                                                                                                |                           |

(Fortsetzung auf Seite 8)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

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- **14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code** Nicht anwendbar.
- **Transport/weitere Angaben:**
- **ADR**
- **Begrenzte Menge (LQ)** 5L
- **Freigestellte Mengen (EQ)** Code: E1  
Höchste Nettomenge je Innenverpackung: 30 ml  
Höchste Nettomenge je Außenverpackung: 1000 ml
- **Beförderungskategorie** 2
- **Tunnelbeschränkungscode** E
- **IMDG**
- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml
- **UN "Model Regulation":** UN 2810 GIFTIGER ORGANISCHER FLÜSSIGER STOFF, N.A.G. (2-HYDROXYETHYLACRYLAT, BENZOIN METHYL ETHER), 6.1, III

### ABSCHNITT 15: Rechtsvorschriften

- **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**
- **Richtlinie 2012/18/EU**
- **Namentlich aufgeführte gefährliche Stoffe - ANHANG I** Keiner der Inhaltsstoffe ist enthalten.
- **Seveso-Kategorie H2 AKUT TOXISCH**
- **Mengenschwelle (in Tonnen) für die Anwendung in Betrieben der unteren Klasse** 50 t
- **Mengenschwelle (in Tonnen) für die Anwendung in Betrieben der oberen Klasse** 200 t
- **VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII** Beschränkungsbedingungen: 3
- **Nationale Vorschriften:**
- **Technische Anleitung Luft:**

| Klasse | Anteil in % |
|--------|-------------|
| I      | 8,7         |
- **Wassergefährdungsklasse: WGK 2 (Selbsteinstufung):** deutlich wassergefährdend.
- **Sonstige Vorschriften, Beschränkungen und Verbotsverordnungen**  
Das Produkt unterliegt der Anlage 2 der Chemikalienverbotsverordnung (ChemVerbotsV) - Anforderungen in Bezug auf die Abgabe
- **15.2 Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

### ABSCHNITT 16: Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

- **Relevante Sätze**  
H301 Giftig bei Verschlucken.  
H302 Gesundheitsschädlich bei Verschlucken.

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*H311 Giftig bei Hautkontakt.**H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.**H315 Verursacht Hautreizungen.**H317 Kann allergische Hautreaktionen verursachen.**H319 Verursacht schwere Augenreizung.**H332 Gesundheitsschädlich bei Einatmen.**H400 Sehr giftig für Wasserorganismen.*
**· Abkürzungen und Akronyme:**
*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 3: Akute Toxizität – Kategorie 3**Acute Tox. 4: Akute Toxizität – Kategorie 4**Skin Corr. 1B: Hautreizende/-ätzende Wirkung – Kategorie 1B**Skin Irrit. 2: Hautreizende/-ätzende Wirkung – Kategorie 2**Eye Dam. 1: Schwere Augenschädigung/Augenreizung – Kategorie 1**Eye Irrit. 2: Schwere Augenschädigung/Augenreizung – Kategorie 2**Skin Sens. 1: Sensibilisierung der Haut – Kategorie 1**Aquatic Acute 1: Gewässergefährdend - akut gewässergefährdend – Kategorie 1*

DE

**Scheda di dati di sicurezza**  
**ai sensi del regolamento 1907/2006/CE, Articolo 31**

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### SEZIONE 1: Identificazione della sostanza o della miscela e della società/impresa

- **1.1 Identificatore del prodotto**
- **Denominazione commerciale:** LOWICRYL MONOSTEP K4M POLAR
- **Articolo numero:** 14335
- **1.2 Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**  
 Non sono disponibili altre informazioni.
- **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio
- **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**
- **Produttore/fornitore:**  
 Electron Microscopy Sciences  
 1560 Industry Road  
 USA-Hatfield, PA 19440  
 Tel: 215-412-8400 Fax: 215-412-8450  
 email: sgkcck@aol.com  
 www.emsdiasum.com
- **Società Italiana Chimici**  
 Via Rio Nell Ellba 140  
 00138 Rome, Italy  
 Tel: 39 06 8800211  
 Fax: 39 30 06 8815313  
 Web: www.sichim.com
- **Informazioni fornite da:** Product safety department
- **1.4 Numero telefonico di emergenza:**  
 ChemTrec 1-800-424-9300 Contract CCN7661  
 1-703-527-3887

### SEZIONE 2: Identificazione dei pericoli

- **2.1 Classificazione della sostanza o della miscela**
- **Classificazione secondo il regolamento (CE) n. 1272/2008**



GHS06 teschio e tibie incrociate

Acute Tox. 3 H301 Tossico se ingerito.



GHS05 corrosione

Skin Corr. 1B H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

Eye Dam. 1 H318 Provoca gravi lesioni oculari.



GHS07

Skin Sens. 1 H317 Può provocare una reazione allergica cutanea.

- **2.2 Elementi dell'etichetta**
- **Etichettatura secondo il regolamento (CE) n. 1272/2008**  
 Il prodotto è classificato ed etichettato conformemente al regolamento CLP.

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· **Pittogrammi di pericolo**

GHS05 GHS06

· **Avvertenza Pericolo**· **Componenti pericolosi che ne determinano l'etichettatura:**

Benzoin Methyl Ether  
acrilato di 2-idrossietile  
mechinolo

· **Indicazioni di pericolo**

H301 Tossico se ingerito.  
H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.  
H317 Può provocare una reazione allergica cutanea.

· **Consigli di prudenza**

P301+P310 **IN CASO DI INGESTIONE:** contattare immediatamente un CENTRO ANTIVELENI/un medico.  
P321 Trattamento specifico (vedere su questa etichetta).  
P303+P361+P353 **IN CASO DI CONTATTO CON LA PELLE (o con i capelli):** togliere immediatamente tutti gli indumenti contaminati. Sciacquare la pelle/fare una doccia.  
P305+P351+P338 **IN CASO DI CONTATTO CON GLI OCCHI:** sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.  
P362+P364 Togliere tutti gli indumenti contaminati e lavarli prima di indossarli nuovamente.  
P405 Conservare sotto chiave.  
P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

· **2.3 Altri pericoli**· **Risultati della valutazione PBT e vPvB**

· **PBT:** Non applicabile.  
· **vPvB:** Non applicabile.

### SEZIONE 3: Composizione/informazioni sugli ingredienti

· **3.2 Caratteristiche chimiche: Miscela**· **Descrizione:** Miscela delle seguenti sostanze con additivi non pericolosi.· **Sostanze pericolose:**

|                                      |                                                                                                                          |           |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 3524-62-7<br>EINECS: 222-538-7  | Benzoin Methyl Ether<br>⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319              | >25-≤50%  |
| CAS: 27813-02-1<br>EINECS: 248-666-3 | acido metacrilico, monoestere con propan-1,2-diolo<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319                          | >10-≤25%  |
| CAS: 818-61-1<br>EINECS: 212-454-9   | acrilato di 2-idrossietile<br>⚠ Acute Tox. 3, H311; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; ⚠ Skin Sens. 1, H317 | >2,5-≤10% |
| CAS: 150-76-5<br>EINECS: 205-769-8   | mechinolo<br>⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317                                                | ≤2,5%     |

· **Ulteriori indicazioni:** Il testo dell'avvertenza dei pericoli citati può essere appreso dal capitolo 16

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**SEZIONE 4: Misure di primo soccorso****· 4.1 Descrizione delle misure di primo soccorso****· Indicazioni generali:**

Allontanare immediatamente gli abiti contaminati dal prodotto.

I sintomi di avvelenamento possono comparire dopo molte ore, per tale motivo è necessaria la sorveglianza di un medico nelle 48 ore successive all'incidente.

In caso di respirazione irregolare o di blocco respiratorio praticare la respirazione artificiale.

**· Inalazione:**

Portare il soggetto in zona molto ben areata e per sicurezza consultare un medico.

Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.

**· Contatto con la pelle:** Lavare immediatamente con acqua e sapone sciacquando accuratamente.**· Contatto con gli occhi:**

Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte e consultare il medico.

**· Ingestione:**

Non provocare il vomito, chiamare subito il medico.

Bere abbondante acqua e sostare in zona ben areata. Richiedere immediatamente l'intervento del medico.

**· 4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.**· 4.3 Indicazione dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali**

Non sono disponibili altre informazioni.

**SEZIONE 5: Misure antincendio****· 5.1 Mezzi di estinzione****· Mezzi di estinzione idonei:**

CO<sub>2</sub>, polvere o acqua nebulizzata. Estinguere gli incendi di grosse dimensioni con acqua nebulizzata o con schiuma resistente all'alcool.

**· 5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.**· 5.3 Raccomandazioni per gli addetti all'estinzione degli incendi****· Mezzi protettivi specifici:** Non sono richiesti provvedimenti particolari.**SEZIONE 6: Misure in caso di rilascio accidentale****· 6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza**

Indossare equipaggiamento protettivo. Allontanare le persone non equipaggiate.

**· 6.2 Precauzioni ambientali:**

In caso di infiltrazione nei corpi d'acqua o nelle fognature avvertire le autorità competenti.

Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.

**· 6.3 Metodi e materiali per il contenimento e per la bonifica:**

Raccogliere il liquido con materiale assorbente (sabbia, tripoli, legante di acidi, legante universale, segatura).

Utilizzare mezzi di neutralizzazione.

Smaltimento del materiale contaminato conformemente al punto 13.

Provvedere ad una sufficiente areazione.

**· 6.4 Riferimento ad altre sezioni**

Per informazioni relative ad una manipolazione sicura, vedere capitolo 7.

Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.

Per informazioni relative allo smaltimento vedere Capitolo 13.

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### SEZIONE 7: Manipolazione e immagazzinamento

- **7.1 Precauzioni per la manipolazione sicura**  
Accurata ventilazione/aspirazione nei luoghi di lavoro.  
Evitare la formazione di aerosol.
- **Indicazioni in caso di incendio ed esplosione:** Non sono richiesti provvedimenti particolari.
- **7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.
- **Indicazioni sullo stoccaggio misto:** Non necessario.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:** Mantenere i recipienti ermeticamente chiusi.
- **7.3 Usi finali particolari** Non sono disponibili altre informazioni.

### SEZIONE 8: Controllo dell'esposizione/protezione individuale

- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.
- **8.1 Parametri di controllo**

• **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**

**150-76-5 mechinolo**

TWA Valore a lungo termine: 5 mg/m<sup>3</sup>

- **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.
- **8.2 Controlli dell'esposizione**
- **Mezzi protettivi individuali:**
- **Norme generali protettive e di igiene del lavoro:**  
Tenere lontano da cibo, bevande e foraggi.  
Togliere immediatamente gli abiti contaminati.  
Lavarsi le mani prima dell'intervallo o a lavoro terminato.  
Evitare il contatto con gli occhi.  
Evitare il contatto con gli occhi e la pelle.
- **Maschera protettiva:**  
Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.
- **Guanti protettivi:**



Guanti protettivi

Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.

A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.

Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.

- **Materiale dei guanti**

La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro. Poiché il prodotto rappresenta una formulazione di più sostanze, la stabilità dei materiali dei guanti non è calcolabile in anticipo e deve essere testata prima dell'impiego

- **Tempo di permeazione del materiale dei guanti**

Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.

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· **Occhiali protettivi:**

Occhiali protettivi a tenuta

**SEZIONE 9: Proprietà fisiche e chimiche**· **9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali**· **Indicazioni generali**· **Aspetto:****Forma:** Liquido**Colore:** Incolore· **Odore:** Forte· **Soglia olfattiva:** Non definito.· **valori di pH:** Non definito.· **Cambiamento di stato****Punto di fusione/punto di congelamento:** Non definito.**Punto di ebollizione iniziale e intervallo di ebollizione:** 246 °C· **Punto di infiammabilità:** 90 °C· **Infiammabilità (solidi, gas):** Non applicabile.· **Temperatura di decomposizione:** Non definito.· **Temperatura di autoaccensione:** Prodotto non autoinfiammabile.· **Proprietà esplosive:** Non definito.· **Limiti di infiammabilità:****Inferiore:** Non definito.**Superiore:** Non definito.· **Tensione di vapore:** Non definito.· **Densità:** Non definito.· **Densità relativa** Non definito.· **Densità di vapore:** Non definito.· **Velocità di evaporazione** Non definito.· **Solubilità in/Miscibilità con acqua:**

Poco e/o non miscibile.

· **Coefficiente di ripartizione: n-ottanolo/acqua:** Non definito.· **Viscosità:****Dinamica:** Non definito.**Cinematica:** Non definito.· **Tenore del solvente:****VOC (CE)** 0,00 %**Contenuto solido:** 0,0 %

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**· 9.2 Altre informazioni**

Non sono disponibili altre informazioni.

**SEZIONE 10: Stabilità e reattività**

- **10.1 Reattività** Non sono disponibili altre informazioni.
- **10.2 Stabilità chimica**
- **Decomposizione termica/ condizioni da evitare:** Il prodotto non si decompone se utilizzato secondo le norme.
- **10.3 Possibilità di reazioni pericolose** Non sono note reazioni pericolose.
- **10.4 Condizioni da evitare** Non sono disponibili altre informazioni.
- **10.5 Materiali incompatibili:** Non sono disponibili altre informazioni.
- **10.6 Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

**SEZIONE 11: Informazioni tossicologiche**

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta**  
Tossico se ingerito.
- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea**  
Provoca gravi ustioni cutanee e gravi lesioni oculari.
- **Lesioni oculari gravi/irritazioni oculari gravi**  
Provoca gravi lesioni oculari.
- **Sensibilizzazione respiratoria o cutanea**  
Può provocare una reazione allergica cutanea.
- **Effetti CMR (cancerogenicità, mutagenicità e tossicità per la riproduzione)**
- **Mutagenicità delle cellule germinali**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Cancerogenicità** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità per la riproduzione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione singola**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione ripetuta**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Pericolo in caso di aspirazione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

**SEZIONE 12: Informazioni ecologiche**

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Effetti tossici per l'ambiente:**
- **Osservazioni:** Tossico per i pesci.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**  
Pericolosità per le acque classe 2 (D) (Autoclassificazione): pericoloso  
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature.  
Non immettere il prodotto non diluito o non neutralizzato nelle acque di scarico e nei canali di raccolta.  
Pericolo per le acque potabili anche in caso di perdite nel sottosuolo di piccole quantità di prodotto.

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- Tossico per pesci e plancton.  
tossico per gli organismi acquatici
- **12.5 Risultati della valutazione PBT e vPvB**
  - **PBT:** Non applicabile.
  - **vPvB:** Non applicabile.
  - **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

### SEZIONE 13: Considerazioni sullo smaltimento

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.

### SEZIONE 14: Informazioni sul trasporto

|                                                                                     |                                                                                          |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| · <b>14.1 Numero ONU</b>                                                            |                                                                                          |
| · <b>ADR, IMDG, IATA</b>                                                            | UN2810                                                                                   |
| · <b>14.2 Nome di spedizione dell'ONU</b>                                           |                                                                                          |
| · <b>ADR</b>                                                                        | 2810 LIQUIDO ORGANICO TOSSICO, N.A.S. (acrilato di 2-idrossietile, Benzoin Methyl Ether) |
| · <b>IMDG, IATA</b>                                                                 | TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)            |
| · <b>14.3 Classi di pericolo connesso al trasporto</b>                              |                                                                                          |
| · <b>ADR, IMDG, IATA</b>                                                            |                                                                                          |
|  |                                                                                          |
| · <b>Classe</b>                                                                     | 6.1 Materie tossiche                                                                     |
| · <b>Etichetta</b>                                                                  | 6.1                                                                                      |
| · <b>14.4 Gruppo di imballaggio</b>                                                 |                                                                                          |
| · <b>ADR, IMDG, IATA</b>                                                            | III                                                                                      |
| · <b>14.5 Pericoli per l'ambiente:</b>                                              | Non applicabile.                                                                         |
| · <b>14.6 Precauzioni speciali per gli utilizzatori</b>                             | Attenzione: Materie tossiche                                                             |
| · <b>Numero Kemler:</b>                                                             | 60                                                                                       |
| · <b>Numero EMS:</b>                                                                | F-A,S-A                                                                                  |
| · <b>Stowage Category</b>                                                           | A                                                                                        |
| · <b>Stowage Code</b>                                                               | SW2 Clear of living quarters.                                                            |
| · <b>14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL ed il codice IBC</b> | Non applicabile.                                                                         |
| · <b>Trasporto/ulteriori indicazioni:</b>                                           |                                                                                          |
| · <b>ADR</b>                                                                        |                                                                                          |
| · <b>Quantità limitate (LQ)</b>                                                     | 5L                                                                                       |

(continua a pagina 8)

**Scheda di dati di sicurezza**  
**ai sensi del regolamento 1907/2006/CE, Articolo 31**

Stampato il: 10.09.2018

Revisione: 10.09.2018

**Denominazione commerciale: LOWICRYL MONOSTEP K4M POLAR**

(Segue da pagina 7)

|                                            |                                                                                                                                |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| · <b>Quantità esenti (EQ)</b>              | Codice: E1<br>Quantità massima netta per imballaggio interno: 30 ml<br>Quantità massima netta per imballaggio esterno: 1000 ml |
| · <b>Categoria di trasporto</b>            | 2                                                                                                                              |
| · <b>Codice di restrizione in galleria</b> | E                                                                                                                              |
| <hr/>                                      |                                                                                                                                |
| · <b>IMDG</b>                              |                                                                                                                                |
| · <b>Limited quantities (LQ)</b>           | 5L                                                                                                                             |
| · <b>Excepted quantities (EQ)</b>          | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml               |
| · <b>UN "Model Regulation":</b>            | UN 2810 LIQUIDO ORGANICO TOSSICO, N.A.S.<br>(ACRILATO DI 2-IDROSSIETILE, BENZOIN METHYL ETHER), 6.1, III                       |

### SEZIONE 15: Informazioni sulla regolamentazione

- **15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**
- **Direttiva 2012/18/UE**
- **Sostanze pericolose specificate - ALLEGATO I** Nessuno dei componenti è contenuto.
- **Categoria Seveso H2 TOSSICITÀ ACUTA**
- **Quantità limite (tonnellate) ai fini dell'applicazione dei requisiti di soglia inferiore** 50 t
- **Quantità limite (tonnellate) ai fini dell'applicazione dei requisiti di soglia superiore** 200 t
- **REGOLAMENTO (CE) n. 1907/2006 ALLEGATO XVII** Restrizioni: 3
- **15.2 Valutazione della sicurezza chimica:** Una valutazione della sicurezza chimica non è stata effettuata.

### SEZIONE 16: Altre informazioni

I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.

- **Frasei rilevanti**

H301 Tossico se ingerito.  
H302 Nocivo se ingerito.  
H311 Tossico per contatto con la pelle.  
H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.  
H315 Provoca irritazione cutanea.  
H317 Può provocare una reazione allergica cutanea.  
H319 Provoca grave irritazione oculare.  
H332 Nocivo se inalato.  
H400 Molto tossico per gli organismi acquatici.

- **Abbreviazioni e acronimi:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

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**Scheda di dati di sicurezza**  
**ai sensi del regolamento 1907/2006/CE, Articolo 31**

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*Acute Tox. 3: Tossicità acuta – Categoria 3**Acute Tox. 4: Tossicità acuta – Categoria 4**Skin Corr. 1B: Corrosione/irritazione della pelle – Categoria 1B**Skin Irrit. 2: Corrosione/irritazione della pelle – Categoria 2**Eye Dam. 1: Gravi lesioni oculari/irritazione oculare – Categoria 1**Eye Irrit. 2: Gravi lesioni oculari/irritazione oculare – Categoria 2**Skin Sens. 1: Sensibilizzazione della pelle – Categoria 1**Aquatic Acute 1: Pericoloso per l'ambiente acquatico - pericolo acuto per l'ambiente acquatico – Categoria 1*

IT

# 물질안전보건자료

## GHS에 따라

기압점: 2018.09.10

개정: 2018.09.10

### 1 화학제품과 회사에 관한 정보

- **제품 식별자**
- **제품명: LOWICRYL MONOSTEP K4M POLAR**
- **상품번호: 14335**
- **해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도** 추가적인 정보가 존재하지 않습니다.
- **제품의 권고 용도와 사용상의 제한:** 실험실 화학품
- **안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보**
- **제조자/수입자/유통업자 정보:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com  
  
Samchang Commercial Co., Ltd.  
Yeo Eui Do  
PO Box 1110  
Seoul, Korea  
Tel: 82 2 703 3040  
Fax: 82 2 717 3298  
  
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Daedok Science, Co. Ltd.  
34141 E10 Korea Advanced Institute of Science  
Guseong-Dong, Yuseong-gu, Daejeon,  
Korea  
Phone: 82 42 710 2091  
Fax: 82 42 367 0005  
Website: www.labsmro.com
- **추가적인 정보 획득 가능:** Product safety department
- **비상연락 전화번호:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 유해성·위험성

- **순물질 또는 혼합물의 분류**



두개골과 대퇴골

급성 독성 - 경구 - 구분 3

H301 삼키면 유독함



부식

피부 부식성/피부 자극성 - 구분 1 H314 피부에 심한 화상과 눈 손상을 일으킴

심한 눈 손상성/눈 자극성 - 구분 1 H318 눈에 심한 손상을 일으킴



피부 과민성 - 구분 1

H317 알레르기성 피부 반응을 일으킬 수 있음

(2 쪽에 계속)

# 물질안전보건자료

## GHS에 따라

기압점: 2018.09.10

개정: 2018.09.10

**제품명: LOWICRYL MONOSTEP K4M POLAR**

(1 쪽부터 계속)

· 라벨표기 요소

· GHS 라벨 요소

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

· 그림문자



GHS05 GHS06

· 신호어 위험

· 상표상에 명확히 위험성이 표시된 성분:

Benzoin Methyl Ether  
2-hydroxyethyl acrylate  
mequinol

· 유해.위험 문구

삼키면 유독함  
피부에 심한 화상과 눈 손상을 일으킴  
알레르기성 피부 반응을 일으킬 수 있음

· 예방조치 문구

삼켰을 시: 즉시 독성물질센터/병원 연락 필요.  
(라벨 참조) 처치를 하시오.  
피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗으시오. 피부를 물로 씻으시오/샤워하시오.  
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면 콘택트렌즈를 제거하시오. 계속 씻으시오.  
오염된 의복은 벗고 다시 사용 전 세척하시오.  
잠금장치가 있는 저장장소에 저장하시오.  
현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

· 기타 유해성

- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

### 3 구성성분의 명칭 및 함유량

· 화학적 특성: 혼합물

· 설명: 무해한 첨가물이 함유된 아래에 열거된 물질로 만들어진 혼합물.

· 위험요소:

|            |                                                                                                                            |           |
|------------|----------------------------------------------------------------------------------------------------------------------------|-----------|
| 3524-62-7  | Benzoin Methyl Ether<br>급성 독성 - 경구 - 구분 3, H301; 심한 눈 손상성/눈 자극성 - 구분 2, H319                                               | >25-≤50%  |
| 27813-02-1 | methacrylic acid, monoester with propane-1,2-diol<br>피부 부식성/피부 자극성 - 구분 2, H315; 심한 눈 손상성/눈 자극성 - 구분 2, H319               | >10-≤25%  |
| 818-61-1   | 2-hydroxyethyl acrylate<br>급성 독성 - 경피 - 구분 3, H311; 피부 부식성/피부 자극성 - 구분 1, H314; 수생환경 유해성 - 급성 1, H400; 피부 과민성 - 구분 1, H317 | >2.5-≤10% |
| 150-76-5   | mequinol<br>급성 독성 - 경구 - 구분 4, H302; 심한 눈 손상성/눈 자극성 - 구분 2, H319; 피부 과민성 - 구분 1, H317                                      | ≤2.5%     |

KR

(3 쪽에 계속)

# 물질안전보건자료

## GHS에 따라

기압점: 2018.09.10

개정: 2018.09.10

**제품명: LOWICRYL MONOSTEP K4M POLAR**

(2 쪽부터계속)

### 4 응급조치 요령

#### · 응급조치요령 내용

##### · 일반적 정보:

이제품에 의해 오염된 의상은 즉시 제거한다.

중독 증상은 몇 시간이 지난 뒤에 발생할 수 있다. 따라서 사고가 발생한 후에 적어도 48 시간동안은 의료진의 관찰을 받아야 한다.

불규칙적인 호흡이나 호흡 정지 상태에서는 인공 호흡을 실시한다.

##### · 흡입했을 때:

신선한 공기를 쐬고 나서 반드시 의료진의 도움을 구한다.

환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.

##### · 피부에 접촉했을 때:

즉시 물과 비누로 씻고 잘 행군다.

##### · 눈에 들어갔을 때:

흐르는 물에 눈을 몇 분 동안 씻어내고 나서, 의사와 상담한다.

##### · 먹었을 때:

구토를 유발시키지 않는다. 즉시 의료진의 도움을 구한다.

물을 충분히 마시고 신선한 공기를 쐬다. 즉시 의사의 도움을 구한다.

##### · 기타 의사의 주의사항:

가장 중요한 급·만성 증상 및 영향 추가적인 정보가 존재하지 않습니다.

즉각적인 의료처리 및 특별치료가 필요함을 시사하는 징후 추가적인 정보가 존재하지 않습니다.

### 5 폭발·화재시 대처방법

#### · 소화제

##### · 적절한 소화제:

이산화탄소, 진화용 석회가루 또는 물방사를 사용하고, 더 큰 화재는 물을 분사하거나 알코올이 함유된 거품으로 끈다.

본 화학물질이나 혼합물에서 발생하는 특별 유해성 추가적인 정보가 존재하지 않습니다.

##### · 소방관에 대한 권고사항

화재 진압 시 착용할 보호구 및 예방조치: 특별한 조치가 필요없음.

### 6 누출 사고 시 대처방법

· 개인적 예방조치, 보호장비 및 응급처리 절차 안전장비 착용하고, 무방비의 사람은 격리시킨다.

##### · 환경 관련 예방조치:

하천이나 하수도로 유입되었을 경우 해당 관청에 보고한다.

하수도망/해수면 위의 물/지하수로도 달하지 않게 한다.

##### · 밀폐 및 정화 방법과 소재:

액체가 혼합된 물질(모래, 규조토, 산성 결합물, 일반 결합물, 톱밥)에 흡입되도록 한다.

중성제를 사용한다.

항목 13에 따라 오염된 물질을 쓰레기로 처분한다.

충분한 환기가 되도록 한다.

##### · 타 섹션 참조

안전 관리에 대한 정보는 제7장을 참고하십시오.

개인 보호 장비에 대한 정보는 제8장을 참고하십시오.

쓰레기 처리에 대한 정보는 제13장을 참고하십시오.

### 7 취급 및 저장방법

#### · 취급:

##### · 안전 취급을 위한 예방조치

작업장에서는 통풍이 잘 되고 습기 제거가 잘 되게 주의한다.

(4 쪽에 계속)

# 물질안전보건자료

## GHS에 따라

기압점: 2018.09.10

개정: 2018.09.10

**제품명: LOWICRYL MONOSTEP K4M POLAR**

(3 쪽부터계속)

- 연무질이형성되는것을피한다.
- 화재 및 폭발 사고 예방대책에 관한 정보:** 특 별 한 조 치 가 필 요없음.
- 혼합위험성 등 안전 저장 조건**
- 보관:**
- 안전한 저장 방법:** 특 별 한 요구사항이 없음.
- 하나의 공동 보관 시설에 대한 보관 관련 정보:** 필 요없음
- 보 관 조 건 에 관 한 추가적인 정보:** 용기를새지않게밀폐한채보관한다.
- 구체적 최종 사용자** 추가적인 정보가 존재하지 않습니다.

## 8 노출방지 및 개인보호구

- 첨단시설 디자인에 대한 추가정보:** 더 이 상 의 자료는 없음. 항 목 7 을 참고하시 오.
- 통제 변수**

- 화학물질의 노출기준, 생물학적 노출기준 등:**

150-76-5 mequinol

|          |                            |
|----------|----------------------------|
| TLV (KR) | 장기간의값: 5 mg/m <sup>3</sup> |
| REL (US) | 장기간의값: 5 mg/m <sup>3</sup> |
| TLV (US) | 장기간의값: 5 mg/m <sup>3</sup> |

- 추 가 정 보:** 제 조 할 당 시에 유 효 한 목 록을 기초로 사용했다.

- 노출 통제**

- 개인 보호구**

- 일반적보호조치및위생조치:**

식료품, 음료수와 사료로부터 멀리 떨어져 두는 다.  
더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.  
휴식 전 이 나 작업이 끝날때마다 손을 씻는다.  
눈과의 접촉을 피한다.  
눈과 피부와의 접촉은 피한다.

- 호흡기 보호:**

단 시간 또는 경미한 오염의 경우에는 호흡여과기를 사용한다. 심각한 또는 장기간 노출시에는 호흡보호장비를 사용한다.

- 손 보호:**



보호용 장갑

장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성이있어야한다.  
테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합물에 적합한 장갑재질에 대한 추천이 없다.  
투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

- 장갑의재료**

적합한장갑의선택은재질차이뿐만아니라품질기준의차이도고려하여이루어져야하고제조업종에따라서도다르게선택되어야한다. 제품은다양한재료로부터의조제로이루어지는것이기때문에, 장갑재질의안정성은사전예측되어질수있는것이아니고, 반드시사용전에 (그안전성이) 체크되어야한다.

- 장갑재료의투과시간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.

(5 쪽에계속)

KR

# 물질안전보건자료

## GHS에 따라

기압점: 2018.09.10

개정: 2018.09.10

**제품명: LOWICRYL MONOSTEP K4M POLAR**

· 눈 보호:

(4 쪽부터계속)



· 팍조이는보안경

### 9 물리화학적 특성

· 기본 물리 및 화학적 특성에 대한 정보

· 일반정보

· 외형

· 물리적 상태:

액체

· 색:

색소가없는

· 냄새:

강력한

· 후각역치

알맞지않다.

· pH:

알맞지않다.

· 상태변화

· 녹는점/어는점:

맞지않는

· 초기 끓는점과 끓는점 범위:

246 °C

· 인화점:

90 °C

· 인화성(고체, 기체):

해당사항 없음.

· 분해 온도:

알맞지않다.

· 자기점화:

이제품은자연발화성이없다.

· 폭발위험:

알맞지않다.

· 인화 또는 폭발 범위의 상한/하한

· 아래로:

알맞지않다.

· 위로:

알맞지않다.

· 증기압:

알맞지않다.

· 밀도:

맞지않는다.

· 비중:

알맞지않다.

· 증기밀도:

알맞지않다.

· 증발 속도:

알맞지않다.

· 용해도:

· 물:

각각의경우에따라서는거의혼합할수없는

· n 옥탄올/물 분배계수:

알맞지않다.

· 점도:

· 역학성:

알맞지않다.

· 동점성:

알맞지않다.

· 용매내용물

VOC (EU)

0.00 %

· 고체의 함량:

0.0 %

· 기타 정보

추가적인 정보가 존재하지 않습니다.

KR

(6 쪽에계속)

# 물질안전보건자료

## GHS에 따라

기압점: 2018.09.10

개정: 2018.09.10

**제품명: LOWICRYL MONOSTEP K4M POLAR**

(5 쪽부터계속)

### 10 안정성 및 반응성

- **반응성** 추가적인 정보가 존재하지 않습니다.
- **화학적 안정성**
- **화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건:** 규정에따라사용할경우해체는없다
- **유해반응 가능성** 위험한반응으로는알려지지않았다.
- **피해야 할 조건** 추가적인 정보가 존재하지 않습니다.
- **혼합 금지 물질:** 추가적인 정보가 존재하지 않습니다.
- **유해분해물질:** 위험성있는분해물들은알려지지않았다.

### 11 독성에 관한 정보

- **독성학적 영향에 대한 정보**
- **급성 독성:**
- **일차적 자극 효과:**
- **피부 부식성 또는 자극성:** 피부와점막에강한부식작용.
- **심한 눈 손상 또는 자극성:**  
강한부식작용  
심각한안구상처의위험이있는강한자극
- **감각화:** 피부접촉을통하여감각화가가능성이있다.
- **추 가 적 인 독성 에 관 한 정보:**  
이제품은유럽공동체의공동분류원칙의합법적인절차에근거하여최근에발효된원고에서아래위험들의사전준비에대하여제시하고있다.  
독성의  
건강에해로운  
부식작용의  
자극적인  
삼킬경우식도나위등의내장기관벽에상처를주는위험과 마찬가지로입주변이나구강에강한부식작용을한다

### 12 환경에 미치는 영향

- **독성**
- **수생독성:** 추가적인 정보가 존재하지 않습니다.
- **지속성 및 분해성** 추가적인 정보가 존재하지 않습니다.
- **환 경 시스 템 에 서 의 행 동:**
- **생물농축 잠재성** 추가적인 정보가 존재하지 않습니다.
- **토양내 이동성** 추가적인 정보가 존재하지 않습니다.
- **생태독성:**
- **의견:** 어류에독이됨
- **추가적인 생태학 정보:**
- **일반 특징:**  
수질오염등급 2 (자체등급분류): 수질오염이된  
지하수나, 하천으로또는하수도망에도달하지않게한다.  
회색시키지않은채또는중화시키지않은채하수도나배수로에도달하지않게해야한다.  
지하수로경미한양이유입되었을경우엔이미식수오염상태이다  
하천에서는역시물고기나플랑크톤게는독성이있다.  
물속의유기체에독이되는것
- **PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과**
- **PBT(잔류성, 생물농축성, 독성 물질):** 해당사항 없음.
- **vPvB(고 잔류성, 고 생물농축성 물질):** 해당사항 없음.

(7 쪽에계속)

KR



# 물질안전보건자료

## GHS에 따라

기압점: 2018.09.10

개정: 2018.09.10

**제품명: LOWICRYL MONOSTEP K4M POLAR**

· 기타 부작용 추가적인 정보가 존재하지 않습니다.

(6 쪽부터계속)

### 13 폐기시 주의사항

- 폐기물 처리 방법
- 권고: 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.
- 비위생적 포장:
- 권고: 당국의지침에입각한쓰레기처리.

### 14 운송에 필요한 정보

|                                                                                     |                                                                                                      |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| · 유엔 번호                                                                             | UN2810                                                                                               |
| · ADR, IMDG, IATA                                                                   |                                                                                                      |
| · UN 적정 선적명                                                                         | 2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)                   |
| · ADR                                                                               | TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)                        |
| · IMDG, IATA                                                                        |                                                                                                      |
| · 교통 위험 클래스                                                                         |                                                                                                      |
| · ADR, IMDG, IATA                                                                   |                                                                                                      |
|  |                                                                                                      |
| · 등급                                                                                | 6.1 독성물질                                                                                             |
| · 위험물 라벨                                                                            | 6.1                                                                                                  |
| · 용기등급                                                                              | III                                                                                                  |
| · ADR, IMDG, IATA                                                                   |                                                                                                      |
| · 환경적 유해물질:                                                                         | 해당사항 없음.                                                                                             |
| · 이용자 특별 예방조치                                                                       | 경고: 독성물질                                                                                             |
| · 위험 코드:                                                                            | 60                                                                                                   |
| · EMS-번호:                                                                           | F-A,S-A                                                                                              |
| · Stowage Category                                                                  | A                                                                                                    |
| · Stowage Code                                                                      | SW2 Clear of living quarters.                                                                        |
| · MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송           | 해당사항 없음.                                                                                             |
| · 운 송/추가 정보:                                                                        |                                                                                                      |
| · ADR                                                                               | 5L                                                                                                   |
| · 한정 수량 (LQ)                                                                        | Code: E1                                                                                             |
| · Excepted quantities (EQ)                                                          | Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · 운송 구분                                                                             | 2                                                                                                    |
| · 터널 제한 코드                                                                          | E                                                                                                    |

(8 쪽에계속)

# 물질안전보건자료

## GHS에 따라

쪽: 8/9

기압점: 2018.09.10

개정: 2018.09.10

**제품명: LOWICRYL MONOSTEP K4M POLAR**

(7 쪽부터계속)

|                            |                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------|
| · IMDG                     |                                                                                                 |
| · Limited quantities (LQ)  | 5L                                                                                              |
| · Excepted quantities (EQ) | Code: E1                                                                                        |
|                            | Maximum net quantity per inner packaging: 30 ml                                                 |
|                            | Maximum net quantity per outer packaging: 1000 ml                                               |
| · UN "모범 규제":              | UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-HYDROXYETHYL ACRYLATE, BENZOIN METHYL ETHER), 6.1, III |

### 15 법적 규제현황

· 산업안전보건법에 의한 규제:

· 제조 등 금지물질:

어떠한내용물도목록화되어있지않다

· 허가대상물질:

어떠한내용물도목록화되어있지않다

· 관리대상유해물질:

어떠한내용물도목록화되어있지않다

· 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률

· Korean Existing Chemical Inventory

|            |                                                   |          |
|------------|---------------------------------------------------|----------|
| 109-16-0   | Triethylene glycol dimethacrylate                 | KE-24994 |
| 27813-02-1 | methacrylic acid, monoester with propane-1,2-diol | KE-25135 |
| 818-61-1   | 2-hydroxyethyl acrylate                           | KE-20489 |
| 142-09-6   | Hexyl methacrylate                                | KE-25023 |
| 150-76-5   | mequinol                                          | KE-23353 |

· 화학물질관리법

· 사고대비물질

어떠한내용물도목록화되어있지않다

· 금지물질

어떠한내용물도목록화되어있지않다

· 제한물질

어떠한내용물도목록화되어있지않다

· 유독물질

어떠한내용물도목록화되어있지않다

· 허가물질

|          |                         |
|----------|-------------------------|
| 818-61-1 | 2-hydroxyethyl acrylate |
|----------|-------------------------|

· GHS 라벨 요소

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

· 그림문자



GHS05 GHS06

(9 쪽에 계속)

KR

# 물질안전보건자료

## GHS에 따라

기압점: 2018.09.10

개정: 2018.09.10

**제품명: LOWICRYL MONOSTEP K4M POLAR**

(8 쪽부터계속)

· **신호어 위험**· **상표상에명확히위험성이표시된성분:**

Benzoin Methyl Ether  
2-hydroxyethyl acrylate  
mequinol

· **유해.위험 문구**

삼키면 유독함  
피부에 심한 화상과 눈 손상을 일으킴  
알레르기성 피부 반응을 일으킬 수 있음

· **예방조치 문구**

삼켰을 시: 즉시 독성물질센터/병원 연락 필요.  
(라벨 참조) 처치를 하시오.  
피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗으시오. 피부를 물로 씻으시오/샤워하시오.  
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하시오. 계속 씻으시오.  
오염된 의복은 벗고 다시 사용 전 세척하시오.  
잠금장치가 있는 저장장소에 저장하시오.  
현지/지역/국가/국제 규정에 따라서 내용물/용기 노출  
· **화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

**16 그 밖의 참고사항**

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은  
기술하지않았으며계약적인법률관계에기반을두고있지도않다

· **최초 작성일자:** 2018.09.10· **개정 횟수 및 최종 개정일자:** 1 / 2018.09.10· **약어와 두문자어:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

KR

# Sikkerhetsdatablad

## iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 10.09.2018

revidert den: 10.09.2018

### Avsnitt 1: Identifikasjon av stoffet/stoffblandingen og av selskapet/foretaket

- **1.1 Produktidentifikator**
- **Handelsnavn:** LOWICRYL MONOSTEP K4M POLAR
- **Artikkelnummer:** 14335
- **1.2 Relevante identifiserte bruksområder for stoffet eller stoffblandingen og bruk som frarådes**  
Ikke noe mer relevant informasjon tilgjengelig.
- **Bruk av stoffet/ tilberedning** laboratoriekjemikalier
- **1.3 Opplysninger om leverandøren av sikkerhetsdatabladet**
- **Produsent/leverandør:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Avdeling for nærmere informasjon:** Product safety department
- **1.4 Nødtelefonnummer**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### Avsnitt 2: Fareidentifikasjon

- **2.1 Klassifisering av stoffet eller stoffblandingen**
- **Klassifisering i henhold til EC-forskrift nr.1272/2008**



GHS06 Dødningshode med korslagte knokler

Acute Tox. 3 H301 Giftig ved svelging.



GHS05 Etsende virkning

Skin Corr. 1B H314 Gir alvorlige etseskader på hud og øyne.

Eye Dam. 1 H318 Gir alvorlig øyeskade.



GHS07

Skin Sens. 1 H317 Kan utløse en allergisk hudreaksjon.

- **2.2 Merkingselementer**
- **Merking iht. bestemmelse (EC) Nr. 1272/2008**  
Produktet er klassifisert og merket i henhold til CLP-forordningen.
- **Farepiktogrammer**



GHS05



GHS06

- **Varselord Fare**

(fortsatt på side 2)

NO

# Sikkerhetsdatablad

## iflg. forordning (EF) nr. 1907/2006, Artikkel 31

Trykkdato: 10.09.2018

revidert den: 10.09.2018

**Handelsnavn: LOWICRYL MONOSTEP K4M POLAR**

(fortsatt fra side 1)

• **Farebestemmende komponenter ved etikettering:**

Benzoin Methyl Ether  
2-hydroksyetylakrylat  
mequinol

• **Faresetninger**

H301 Giftig ved svelging.  
H314 Gir alvorlige etseskader på hud og øyne.  
H317 Kan utløse en allergisk hudreaksjon.

• **Sikkerhetssetninger**

P301+P310 VED SVELGING: Kontakt umiddelbart et GIFTINFORMASJONSSENTER/ en lege.  
P321 Særlig behandling (se på etiketten).  
P303+P361+P353 VED HUDKONTAKT (eller håret): Tilsølte klær må fjernes straks. Skyll/dusj huden med vann.  
P305+P351+P338 VED KONTAKT MED ØYNENE: Skyll forsiktig med vann i flere minutter. Fjern eventuelle kontaktlinser dersom dette enkelt lar seg gjøre. Fortsett skyllingen.  
P362+P364 Tilsølte klær må fjernes og vaskes før bruk.  
P405 Oppbevares innelåst.  
P501 Innholdet / emballasjen skal avhendes i henhold til de lokale / regionale / nasjonale / internasjonale forskrifter.

• **2.3 Andre farer**

• **Resultater av PBT- og vPvB-vurdering**

• **PBT:** Ikke brukbar.

• **vPvB:** Ikke brukbar.

### Avsnitt 3: Sammensetning/opplysninger om bestanddeler

• **3.2 Kjemisk karakterisering: Stoffblandinger**

• **Beskrivelse:** Blanding av nedenstående oppførte stoffer med ufarlige tilsetninger.

• **Farlige innholdsstoffer:**

|                                      |                                                                                                                        |           |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 3524-62-7<br>EINECS: 222-538-7  | Benzoin Methyl Ether<br>⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319            | >25-≤50%  |
| CAS: 27813-02-1<br>EINECS: 248-666-3 | methacrylic acid, monoester with propane-1,2-diol<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319                         | >10-≤25%  |
| CAS: 818-61-1<br>EINECS: 212-454-9   | 2-hydroksyetylakrylat<br>⚠ Acute Tox. 3, H311; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400;<br>⚠ Skin Sens. 1, H317 | >2,5-≤10% |
| CAS: 150-76-5<br>EINECS: 205-769-8   | mequinol<br>⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317                                               | ≤2,5%     |

• **Ytterligere informasjon:** Teksten til de fareangivelsene som er inkludert her, kan konsulteres i kapittel 16.

### Avsnitt 4: Førstehjelpstiltak

• **4.1 Beskrivelse av førstehjelpstiltak**

• **Generelle informasjon:**

Klær som er tilsølt med produktet må fjernes omgående.  
Forgiftningssymptomer kan også oppstå etter mange timer. Personer må derfor ha legetilsyn i minst 48 timer etter en ulykke.  
Kunstig åndedrett ved uregelmessig åndedrett eller åndedrettsstillstand.

• **Etter innånding:**

Rikelig frisklufttilførsel, søk legehjelp for sikkerhets skyld.

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- Ved bevisstløshet lagring og transport i stabil sidestilling.
- **Etter hudkontakt:** Vask straks med vann og sepe og skylld godt etterpå.
  - **Etter øyekontakt:** Skylld øynene med åpne øyenlokk i flere minutter under rennende vann og tilkall lege.
  - **Etter svelging:**  
Ikke få pasienten til å kaste opp. Tilkall lege straks.  
Drikk rikelig med vann og sørg for frisk luft. Tilkall lege omgående.
  - **4.2 De viktigste symptomene og virkningene, både akutte og forsinkede**  
Ikke noe mer relevant informasjon tilgjengelig.
  - **4.3 Angivelse av om umiddelbar legehjelp og spesialbehandling er nødvendig**  
Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 5: Brannsløkkingstiltak

- **5.1 Slökkingsmidler**
- **Egnede slukningsmidler:**  
CO<sub>2</sub>, slukningspulver eller vann i spredt stråle. Større branner bekjempes med vann i spredt stråle eller med skum som er motstandsdyktig mot alkohol.
- **5.2 Særlige farer knyttet til stoffet eller stoffblandingen** Ikke noe mer relevant informasjon tilgjengelig.
- **5.3 Råd til brannmannskaper**
- **Spesielt verneutstyr:** Ingen spesielle tiltak nødvendig.

### Avsnitt 6: Tiltak ved utilsiktede utslipp

- **6.1 Personlige forsiktighetsregler, personlig verneutstyr og nødrutiner**  
Ta på beskyttelsesdrakt. Hold ubeskyttede personer borte.
- **6.2 Forsiktighetsregler med hensyn til miljø**  
Ansvarlige myndigheter varsles hvis produktet er kommet ned i vassdrag eller kloakk.  
La ikke produktet komme ned i kloakk/overflatevann/grunnvann.
- **6.3 Metoder og materialer for oppsamling og rensing**  
Ta opp stoffet med væskebindende materiale (sand, kiselgur, syrebindemiddel, universalbindemiddel, sagflis).  
Bruk nøytraliseringsmiddel.  
Bortskaff kontaminert materiale som avfall i.h.t. punkt 13.  
Sørg for tilstrekkelig ventilasjon.
- **6.4 Henvisning til andre avsnitt**  
Informasjoner om sikker håndtering, se kapittel 7.  
Informasjoner om personlig beskyttelsesutstyr, se kapittel 8.  
Informasjoner om bortskaffelse/deponering, se kapittel 13.

### Avsnitt 7: Håndtering og lagring

- **7.1 Forsiktighetsregler for sikker håndtering**  
Sørg for god ventilasjon/avsugning på arbeidsplassen.  
Unngå aerosoldannelse.
- **Henvisninger om brann- og eksplosjonsvern:** Ingen særlige tiltak nødvendig.
- **7.2 Vilkår for sikker lagring, herunder eventuelle uforenligheter**
- **Lagring:**
- **Krav til lagerrom og beholdere:** Ingen spesielle krav.
- **Informasjoner om felles lagring:** Ikke nødvendig.
- **Ytterligere informasjoner om lagervilkårene:** Hold beholderne tett tillukket.

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- 7.3 Særlig(e) sluttanvendelse(r) Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 8: Eksponeringskontroll / personlig verneutstyr

- Ytterligere informasjon om utforming av tekniske anlegg: Ingen ytterligere informasjon, se punkt 7.

#### · 8.1 Kontrollparametrer

- Komponenter med grenseverdier for arbeidsplass som må overholdes:

**150-76-5 mequinol**AG Langtidsverdi: 5 mg/m<sup>3</sup>

- Ytterligere informasjon: Basis: listene som var gyldige ved oppstillingen.

#### · 8.2 Eksponeringskontroll

##### · Personlig verneutstyr:

##### · Generelle verne- og hygienetiltak:

Holdes adskilt fra næringsmidler, drikkevarer og fødevarer.

Fjern omgående forurensede, gjennomvåtede klær.

Vask hendene før arbeidspauser og ved arbeidets slutt.

Unngå berøring med øynene.

Unngå berøring med øyne og hud.

##### · Åndedrettsvern:

Ved korttidig eller liten belastning åndedrettsfilterapparat; ved intensiv eller lengre utsetting: bruk omluft-uavhengig åndedrettsbeskyttelsesapparat.

##### · Håndvern:



Beskyttelseshansker

Hanskematerialet må være ugjennomtrengelig og bestandig overfor produktet /stoffet /blandingen.

På grunn av manglende tester kan det ikke gis noen anbefaling om hanskemateriale for produktet / tilberedningsprosessen/kjemikalieblandingen.

Hanskematerialet velges under hensyntagen til holdbarhetstid, gjennomtrengelighet og degradering.

##### · hanskemateriale

Valget av egnet hanske er ikke bare avhengig av materiale, men også av andre kvalitetskennetegn og er forskjellig fra produsent til produsent. Da produktet representerer en sammensetning av flere stoffer, kan holdbarheten av hanskematerialet ikke forhåndsregnes, og denne må testes før bruk.

##### · gjennomtrengingstid for hanskemateriale

Den nøyaktige holdbarhetstiden må bringes på det rene hos hanskeprodusenten og overholdes.

##### · Øyevern:



Tettsittende vernebrille

### Avsnitt 9: Fysiske og kjemiske egenskaper

#### · 9.1 Opplysninger om grunnleggende fysiske og kjemiske egenskaper

##### · alminnelige opplysninger

##### · Utseende:

**Form:**

Væske

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|                                                 |                                                 |
|-------------------------------------------------|-------------------------------------------------|
| <b>Farge:</b>                                   | Fargeløs                                        |
| · <b>Lukt:</b>                                  | Sterk                                           |
| · <b>Luktterskel:</b>                           | Ikke bestemt.                                   |
| · <b>pH-verdi:</b>                              | Ikke bestemt.                                   |
| · <b>Tilstandsendring</b>                       |                                                 |
| <b>Smeltepunkt/frysepunkt:</b>                  | Ikke bestemt.                                   |
| <b>Startkokepunkt og kokeområde:</b>            | 246 °C                                          |
| · <b>Flammepunkt:</b>                           | 90 °C                                           |
| · <b>Antennelighet (fast stoff, gass):</b>      | Ikke brukbar.                                   |
| · <b>Nedbrytingstemperatur:</b>                 | Ikke bestemt.                                   |
| · <b>Selvantennelsestemperatur:</b>             | Produktet er ikke selvantennelig.               |
| · <b>Eksplorative egenskaper:</b>               | Ikke bestemt.                                   |
| · <b>Ekspljosjonsgrenser:</b>                   |                                                 |
| <b>Nedre:</b>                                   | Ikke bestemt.                                   |
| <b>Øvre</b>                                     | Ikke bestemt.                                   |
| · <b>Damptrykk:</b>                             | Ikke bestemt.                                   |
| · <b>Tetthet:</b>                               | Ikke bestemt.                                   |
| · <b>Relativ tetthet:</b>                       | Ikke bestemt.                                   |
| · <b>Damptetthet:</b>                           | Ikke bestemt.                                   |
| · <b>Fordampingshastighet:</b>                  | Ikke bestemt.                                   |
| · <b>Løslighet i / blandbarhet med vann:</b>    | Ikke, hhv. lite blandbar.                       |
| · <b>Fordelingskoeffisient; n-oktanol/vann:</b> | Ikke bestemt.                                   |
| · <b>Viskositet:</b>                            |                                                 |
| <b>Dynamisk:</b>                                | Ikke bestemt.                                   |
| <b>Kinematisk:</b>                              | Ikke bestemt.                                   |
| · <b>Løsningsmiddelandel:</b>                   |                                                 |
| <b>VOC (EF)</b>                                 | 0,00 %                                          |
| <b>Andel faste stoffer:</b>                     | 0,0 %                                           |
| · <b>9.2 Andre opplysninger</b>                 | Ikke noe mer relevant informasjon tilgjengelig. |

### Avsnitt 10: Stabilitet og reaktivitet

- **10.1 Reaktivitet** Ikke noe mer relevant informasjon tilgjengelig.
- **10.2 Kjemisk stabilitet**
- **Termisk spaltning / vilkår som må unngås:** Ingen spaltning ved formålsriktig bruk.
- **10.3 Risiko for farlige reaksjoner** Det kjennes ingen farlige reaksjoner.
- **10.4 Forhold som skal unngås** Ikke noe mer relevant informasjon tilgjengelig.
- **10.5 Uforenlige materialer** Ikke noe mer relevant informasjon tilgjengelig.
- **10.6 Farlige nedbrytingsprodukter** Ingen farlige spalttingsprodukter kjente.

NO

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### Avsnitt 11: Toksikologiske opplysninger

- **11.1 Opplysninger om toksikologiske virkninger**
- **Akutt giftighet**  
Giftig ved svelging.
- **Primær irritasjonsvirkning:**
- **Hudetsing/hudirritasjon**  
Gir alvorlige etseskader på hud og øyne.
- **Alvorlig øyeskade/øyeirritasjon**  
Gir alvorlig øyeskade.
- **Sensibilisering ved innånding eller hudkontakt**  
Kan utløse en allergisk hudreaksjon.
- **Informasjon om følgende grupper med potensielle virkninger:**
- **CMR-virkninger (kreftfremkallende virkninger, arvestoffskadelige og reproduksjonsskadelige virkninger)**
- **Arvestoffskadelig virkning på kjønnsceller** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Kreftfremkallende egenskap** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Reproduksjonstoksisitet** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **STOT – enkelteksponering** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **STOT – gjentatt eksponering** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Aspirasjonsfare** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.

### Avsnitt 12: Økologiske opplysninger

- **12.1 Giftighet**
- **Akvatisk toksisitet:** Ikke noe mer relevant informasjon tilgjengelig.
- **12.2 Persistens og nedbrytbarhet** Ikke noe mer relevant informasjon tilgjengelig.
- **12.3 Bioakkumuleringsevne** Ikke noe mer relevant informasjon tilgjengelig.
- **12.4 Mobilitet i jord** Ikke noe mer relevant informasjon tilgjengelig.
- **Økotoksiske virkninger:**
- **Bemerkning:** giftig for fisk
- **Ytterligere økologiske informasjoner:**
- **Generelle informasjoner:**  
Vannfareklasse 2 (D) (Selvklassifisering): farlig for vann  
Ikke la stoffet komme ned i grunnvannet, i vassdrag eller i kloakker.  
Må ikke komme ufortynnet eller unøytralisert ned i spillvann eller i avløpsgrøft.  
Fare for drikkevann allerede ved utstrømning av små mengder i marken.  
I vassdrag også giftig for fisker og plankton.  
giftig for vannorganismer
- **12.5 Resultater av PBT- og vPvB-vurdering**
- **PBT:** Ikke brukbar.
- **vPvB:** Ikke brukbar.
- **12.6 Andre skadevirkninger** Ikke noe mer relevant informasjon tilgjengelig.

### Avsnitt 13: Sluttbehandling

- **13.1 Avfallsbehandlingsmetoder**
- **Anbefaling:** Må ikke bortskaffes sammen med husholdningsavfall. Må ikke komme ned i kloakk.

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- Ikke rengjort emballasje:
- Anbefaling: Deponering i henhold til myndighetenes forskrifter.

### Avsnitt 14: Transportopplysninger

|                                                                                   |                                                                                                                  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| · 14.1 FN-nummer                                                                  |                                                                                                                  |
| · ADR, IMDG, IATA                                                                 | UN2810                                                                                                           |
| · 14.2 FN-forsendelsesnavn                                                        |                                                                                                                  |
| · ADR                                                                             | 2810 GIFTIG VÆSKE, ORGANISK, N.O.S (2-hydroksyetylakrylat, Benzoin Methyl Ether)                                 |
| · IMDG, IATA                                                                      | TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)                                    |
| · 14.3 Transportfareklasse(r)                                                     |                                                                                                                  |
| · ADR, IMDG, IATA                                                                 |                                                                                                                  |
|  |                                                                                                                  |
| · klasse                                                                          | 6.1 Giftige stoffer                                                                                              |
| · Fareseddel                                                                      | 6.1                                                                                                              |
| · 14.4 Emballasjegruppe                                                           |                                                                                                                  |
| · ADR, IMDG, IATA                                                                 | III                                                                                                              |
| · 14.5 Miljøfarer                                                                 | Ikke brukbar.                                                                                                    |
| · 14.6 Særlige forsiktighetsregler ved bruk                                       | Advarsel: Giftige stoffer                                                                                        |
| · Kemler-tall:                                                                    | 60                                                                                                               |
| · EMS-nummer:                                                                     | F-A,S-A                                                                                                          |
| · Stowage Category                                                                | A                                                                                                                |
| · Stowage Code                                                                    | SW2 Clear of living quarters.                                                                                    |
| · 14.7 Bulktransport i henhold til vedlegg II til MARPOL 73/78 og IBC-regelverket | Ikke brukbar.                                                                                                    |
| · Transport/ytterligere informasjon:                                              |                                                                                                                  |
| · ADR                                                                             |                                                                                                                  |
| · Begrenset mengde (LQ)                                                           | 5L                                                                                                               |
| · Unntatte mengder (EQ)                                                           | Kode: E1<br>Maksimal nettovekt per inneremballasje: 30 ml<br>Maksimal nettovekt per ytteremballasje: 1000 ml     |
| · Transportkategori                                                               | 2                                                                                                                |
| · Tunnel restriksjonskode                                                         | E                                                                                                                |
| · IMDG                                                                            |                                                                                                                  |
| · Limited quantities (LQ)                                                         | 5L                                                                                                               |
| · Excepted quantities (EQ)                                                        | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |

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NO

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· **UN "Model Regulation":** *UN 2810 GIFTIG VÆSKE, ORGANISK, N.O.S (2-HYDROKSYETYLAKRYLAT, BENZOIN METHYL ETHER), 6.1, III*

### Avsnitt 15: Opplysninger om regelverk

· **15.2 Vurdering av kjemikaliesikkerhet** En kjemisk sikkerhetsvurdering er ikke utført.

### Avsnitt 16: Andre opplysninger

Opplysningene er basert på vårt kjennskap i dag. De utgjør dog ingen forsikring om produktegenskaper og er ikke grunnlag for noe kontraktmessig rettsforhold.

· **Relevante satser**

H301 Giftig ved svelging.  
H302 Farlig ved svelging.  
H311 Giftig ved hudkontakt.  
H314 Gir alvorlige etseskader på hud og øyne.  
H315 Irriterer huden.  
H317 Kan utløse en allergisk hudreaksjon.  
H319 Gir alvorlig øyeirritasjon.  
H332 Farlig ved innånding.  
H400 Meget giftig for liv i vann.

· **Forkortelser og akronymer:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 3: Akutt giftighet – Kategori 3  
Acute Tox. 4: Akutt giftighet – Kategori 4  
Skin Corr. 1B: Hudetsing/hudirritasjon – Kategori 1B  
Skin Irrit. 2: Hudetsing/hudirritasjon – Kategori 2  
Eye Dam. 1: Alvorlig øyeskade/øyeirritasjon – Kategori 1  
Eye Irrit. 2: Alvorlig øyeskade/øyeirritasjon – Kategori 2  
Skin Sens. 1: Hudsensibilisering – Kategori 1  
Aquatic Acute 1: Farlig for vannmiljøet - akutt fare for vannmiljøet – Kategori 1

NO

**Ficha de dados de segurança**  
em conformidade com 1907/2006/CE, Artigo 31º

data da impressão 10.09.2018

Revisão: 10.09.2018

### SECÇÃO 1: Identificação da substância/mistura e da sociedade/empresa

- **1.1 Identificador do produto**
- **Nome comercial:** LOWICRYL MONOSTEP K4M POLAR
- **Código do produto:** 14335
- **1.2 Utilizações identificadas relevantes da substância ou mistura e utilizações desaconselhadas**  
Não existe mais nenhuma informação relevante disponível.
- **Utilização da substância / da preparação** Químicos de laboratório
- **1.3 Identificação do fornecedor da ficha de dados de segurança**
- **Fabricante/fornecedor:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Entidade para obtenção de informações adicionais:** Product safety department
- **1.4 Número de telefone de emergência:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECÇÃO 2: Identificação dos perigos

- **2.1 Classificação da substância ou mistura**
- **Classificação em conformidade com o Regulamento (CE) n.º 1272/2008**



GHS06 caveira sobre tóxicas cruzadas

Acute Tox. 3 H301 Tóxico por ingestão.



GHS05 corrosão

Skin Corr. 1B H314 Provoca queimaduras na pele e lesões oculares graves.

Eye Dam. 1 H318 Provoca lesões oculares graves.



GHS07

Skin Sens. 1 H317 Pode provocar uma reacção alérgica cutânea.

- **2.2 Elementos do rótulo**
- **Rotulagem em conformidade com o Regulamento (CE) n.º 1272/2008**  
O produto classificou-se e está etiquetado em conformidade com o regulamento CLP.
- **Pictogramas de perigo**



GHS05



GHS06

- **Palavra-sinal Perigo**

( continuação na página 2 )

**Ficha de dados de segurança**  
em conformidade com 1907/2006/CE, Artigo 31º

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Revisão: 10.09.2018

**Nome comercial: LOWICRYL MONOSTEP K4M POLAR**

( continuação da página 1 )

· **Componentes determinantes para os perigos constantes do rótulo:**

Benzoin Methyl Ether  
acrilato de 2-hidroxietilo  
mequinol

· **Advertências de perigo**

H301 Tóxico por ingestão.  
H314 Provoca queimaduras na pele e lesões oculares graves.  
H317 Pode provocar uma reacção alérgica cutânea.

· **Recomendações de prudência**

P301+P310 EM CASO DE INGESTÃO: contacte imediatamente um CENTRO DE INFORMAÇÃO ANTIVENENOS/médico.

P321 Tratamento específico (ver no presente rótulo).

P303+P361+P353 SE ENTRAR EM CONTACTO COM A PELE (ou o cabelo): retirar imediatamente toda a roupa contaminada. Enxaguar a pele com água/tomar um duche.

P305+P351+P338 SE ENTRAR EM CONTACTO COM OS OLHOS: enxaguar cuidadosamente com água durante vários minutos. Se usar lentes de contacto, retire-as, se tal lhe for possível. Continuar a enxaguar.

P362+P364 Retirar a roupa contaminada e lavá-la antes de a voltar a usar.

P405 Armazenar em local fechado à chave.

P501 Eliminar o conteúdo/recipiente de acordo com a legislação local/regional/nacional/internacional.

· **2.3 Outros perigos**· **Resultados da avaliação PBT e mPmB**

· **PBT:** Não aplicável.

· **mPmB:** Não aplicável.

### SECÇÃO 3: Composição/informação sobre os componentes

· **3.2 Caracterização química: Misturas**

· **Descrição:** Mistura das seguintes substâncias com aditivos não perigosos.

· **Substâncias perigosas:**

|                                      |                                                                                                                          |           |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 3524-62-7<br>EINECS: 222-538-7  | Benzoin Methyl Ether<br>⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319              | >25-≤50%  |
| CAS: 27813-02-1<br>EINECS: 248-666-3 | ácido metacrílico, monoéster com propano-1,2-diol<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319                           | >10-≤25%  |
| CAS: 818-61-1<br>EINECS: 212-454-9   | acrilato de 2-hidroxietilo<br>⚠ Acute Tox. 3, H311; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; ⚠ Skin Sens. 1, H317 | >2,5-≤10% |
| CAS: 150-76-5<br>EINECS: 205-769-8   | mequinol<br>⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317                                                 | ≤2,5%     |

· **Avisos adicionais:** O texto das indicações de perigo aqui incluído poderá ser consultado no capítulo 16.

### SECÇÃO 4: Medidas de primeiros socorros

· **4.1 Descrição das medidas de primeiros socorros**· **Indicações gerais:**

O vestuário contaminado com substâncias perigosas deve ser imediatamente removido.

Os sintomas de envenenamento podem surgir apenas após várias horas, por isso é necessária vigilância médica pelo menos 48 horas após o acidente.

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*Em caso de respiração irregular ou paragem da respiração, executar respiração artificial.***· Em caso de inalação:***Assegurar uma boa entrada de oxigénio e, por razões de segurança, procurar auxílio médico.**Se a vítima estiver inconsciente, posicioná-la e transportá-la com estabilidade, deitada lateralmente.***· Em caso de contacto com a pele: Lavar imediatamente com água e sabão e enxaguar abundantemente.****· Em caso de contacto com os olhos:***Enxaguar os olhos durante alguns minutos sob água corrente, mantendo as pálpebras abertas, e consultar o médico.***· Em caso de ingestão:***Não induzir o vômito; consultar o médico imediatamente.**Beber bastante água e respirar ar fresco. Consultar imediatamente um médico.***· 4.2 Sintomas e efeitos mais importantes, tanto agudos como retardados***Não existe mais nenhuma informação relevante disponível.***· 4.3 Indicações sobre cuidados médicos urgentes e tratamentos especiais necessários***Não existe mais nenhuma informação relevante disponível.***SECÇÃO 5: Medidas de combate a incêndios****· 5.1 Meios de extinção****· Meios adequados de extinção:***CO2, pó extintor ou jacto de água. Um incêndio de grandes dimensões deve ser combatido com jacto de água ou espuma resistente ao álcool.***· 5.2 Perigos especiais decorrentes da substância ou mistura***Não existe mais nenhuma informação relevante disponível.***· 5.3 Recomendações para o pessoal de combate a incêndios****· Equipamento especial de protecção:** Não são necessárias medidas especiais.**SECÇÃO 6: Medidas a tomar em caso de fugas accidentais****· 6.1 Precauções individuais, equipamento de protecção e procedimentos de emergência***Usar equipamento de protecção. Manter as pessoas desprotegidas afastadas.***· 6.2 Precauções a nível ambiental:***Em caso de infiltrações nos leitos de água ou na canalização, comunicar aos serviços públicos competentes.**Evitar que penetre na canalização / águas superficiais / águas subterrâneas.***· 6.3 Métodos e materiais de confinamento e limpeza:***Recolher com produtos que absorvam líquidos (areia, seixos, absorventes universais, serradura ).**Aplicar um agente de neutralização.**Eliminar residualmente as substâncias contaminadas como um resíduo segundo o Ponto 13.**Assegurar uma ventilação adequada.***· 6.4 Remissão para outras secções***Para informações sobre uma manipulação segura, ver o capítulo 7.**Para informações referentes ao equipamento de protecção individual, ver o capítulo 8.**Para informações referentes à eliminação residual, ver o capítulo 13.***SECÇÃO 7: Manuseamento e armazenagem****· 7.1 Precauções para um manuseamento seguro***Assegurar uma boa ventilação / exaustão no local de trabalho.**Evitar a formação de aerossóis.***· Precauções para prevenir incêndios e explosões:** Não são necessárias medidas especiais.

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- 7.2 Condições de armazenagem segura, incluindo eventuais incompatibilidades
- Armazenagem:
- Requisitos para espaços ou contentores para armazenagem: Sem requisitos especiais.
- Avisos para armazenagem conjunta: Não necessário.
- Outros avisos sobre as condições de armazenagem: Manter o recipiente hermeticamente fechado.
- 7.3 Utilização(ões) final(is) específica(s) Não existe mais nenhuma informação relevante disponível.

## SECÇÃO 8: Controlo da exposição/Protecção individual

- Indicações adicionais para concepção de instalações técnicas: Não existem outras informações, ver ponto 7.

### · 8.1 Parâmetros de controlo

- Componentes cujo valor do limite de exposição no local de trabalho deve ser monitorizado:

#### 150-76-5 mequinol

|     |                                                                                    |
|-----|------------------------------------------------------------------------------------|
| VLE | Valor para exposição longa: 5 mg/m <sup>3</sup><br>irritação ocular; lesão cutânea |
|-----|------------------------------------------------------------------------------------|

- Indicações adicionais: Foram utilizadas como base as listas válidas à data da elaboração.

### · 8.2 Controlo da exposição

- Equipamento de protecção individual:

- Medidas gerais de protecção e higiene:

Manter afastado de alimentos, bebidas e forragens.

Despir imediatamente a roupa contaminada e embebida.

Lavar as mãos antes das pausas e no fim do trabalho.

Evitar o contacto com os olhos.

Evitar o contacto com os olhos e com a pele.

- Protecção respiratória:

Utilizar uma máscara respiratória se a exposição for reduzida ou durante um curto espaço de tempo; se esta for mais prolongada ou mais intensa, utilizar uma máscara respiratória independente do ar ambiente.

- Protecção das mãos:



Luvas de protecção

O material das luvas tem de ser impermeável e resistente ao produto / à substância / preparação.

Uma vez que não foram realizados testes nesta área, não podemos recomendar um determinado tipo de material para as luvas que seja adequado para o produto / a preparação / a mistura de químicos.

Escolher o material das luvas tendo em consideração a durabilidade, a permeabilidade e a degradação.

- Material das luvas

A escolha das luvas mais adequadas não depende apenas do material, mas também de outras características qualitativas e varia de fabricante para fabricante. O facto de o produto ser composto por uma variedade de materiais leva a que não seja possível prever a duração dos mesmos e, consequentemente, das luvas, sendo assim necessário proceder a uma verificação antes da sua utilização.

- Tempo de penetração no material das luvas

Deve informar-se sobre a validade exacta das suas luvas junto do fabricante e respeitá-la.

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· **Protecção dos olhos:**

Óculos de protecção totalmente fechados

**SECÇÃO 9: Propriedades físico-químicas**· **9.1 Informações sobre propriedades físicas e químicas de base**· **Informações gerais**· **Aspetto:****Forma:**

Líquido

**Cor:**

Incolor

· **Odor:**

Forte

· **Limiar olfactivo:**

Não classificado.

· **valor pH:**

Não classificado.

· **Mudança do estado:****Ponto de fusão/ponto de congelação:**

Não classificado.

**Ponto de ebulição inicial e intervalo de ebulição:** 246 °C· **Ponto de inflamação:**

90 °C

· **Inflamabilidade (sólido, gás):**

Não aplicável.

· **Temperatura de decomposição:**

Não classificado.

· **Temperatura de autoignição:**

O produto não é auto-inflamável.

· **Propriedades explosivas:**

Não classificado.

· **Limites de explosão:****Inferior:**

Não classificado.

**Superior:**

Não classificado.

· **Pressão de vapor:**

Não classificado.

· **Densidade:**

Não classificado.

· **Densidade relativa**

Não classificado.

· **Densidade de vapor**

Não classificado.

· **Taxa de evaporação:**

Não classificado.

· **Solubilidade em / miscibilidade com água:**

Pouco misturável.

· **Coefficiente de partição: n-octanol/água**

Não classificado.

· **Viscosidade:****Dinâmico:**

Não classificado.

**Cinemático:**

Não classificado.

· **Percentagem de solvente:****VOC (UE)**

0,00 %

**Percentagem de substâncias sólidas:**

0,0 %

· **9.2 Outras informações**

Não existe mais nenhuma informação relevante disponível.

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**SECÇÃO 10: Estabilidade e reactividade**

- **10.1 Reactividade** Não existe mais nenhuma informação relevante disponível.
- **10.2 Estabilidade química**
- **Decomposição térmica / condições a evitar:** Não existe decomposição se usado de acordo com as especificações.
- **10.3 Possibilidade de reações perigosas** Não se conhecem reacções perigosas.
- **10.4 Condições a evitar** Não existe mais nenhuma informação relevante disponível.
- **10.5 Materiais incompatíveis:** Não existe mais nenhuma informação relevante disponível.
- **10.6 Produtos de decomposição perigosos:** Não se conhecem produtos de decomposição perigosos.

**SECÇÃO 11: Informação toxicológica**

- **11.1 Informações sobre os efeitos toxicológicos**
- **Toxicidade aguda**  
Tóxico por ingestão.
- **Efeito de irritabilidade primário:**
- **Corrosão/irritação cutânea**  
Provoca queimaduras na pele e lesões oculares graves.
- **Lesões oculares graves/irritação ocular**  
Provoca lesões oculares graves.
- **Sensibilização respiratória ou cutânea**  
Pode provocar uma reacção alérgica cutânea.
- **Efeitos CMR (carcinogenicidade, mutagenicidade e efeitos tóxicos na reprodução)**
- **Mutagenicidade em células germinativas**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Carcinogenicidade** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade reprodutiva** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade para órgãos-alvo específicos (STOT) - exposição única**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade para órgãos-alvo específicos (STOT) - exposição repetida**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Perigo de aspiração** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.

**SECÇÃO 12: Informação ecológica**

- **12.1 Toxicidade**
- **Toxicidade aquática:** Não existe mais nenhuma informação relevante disponível.
- **12.2 Persistência e degradabilidade** Não existe mais nenhuma informação relevante disponível.
- **12.3 Potencial de bioacumulação** Não existe mais nenhuma informação relevante disponível.
- **12.4 Mobilidade no solo** Não existe mais nenhuma informação relevante disponível.
- **Efeitos ecotóxicos:**
- **Observação:** Tóxico para os peixes.
- **Outras indicações ecológicas:**
- **Indicações gerais:**  
Classe de perigo para a água 2 (D) (auto-classificação): perigoso para a água.  
Não deixar chegar às águas subterrâneas, aos cursos de água nem à canalização.  
Substâncias concentradas, ou seja não neutralizadas, não podem chegar aos esgotos nem às águas.  
Perigo de poluição da água potável mesmo se forem derramadas quantidades muito pequenas no subsolo.  
Tóxico nas águas para os peixes e para o plâncton.  
tóxico para os organismos aquáticos
- **12.5 Resultados da avaliação PBT e mPmB**
- **PBT:** Não aplicável.

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- **mPmB:** Não aplicável.
- **12.6 Outros efeitos adversos** Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 13: Considerações relativas à eliminação

- **13.1 Métodos de tratamento de resíduos**
- **Recomendação:** Não se pode eliminar juntamente com o lixo doméstico. Não permita que chegue à canalização.
- **Embalagens contaminadas:**
- **Recomendação:** Eliminação residual conforme o regulamento dos serviços públicos.

### SECÇÃO 14: Informações relativas ao transporte

- |                                                                                                     |                                                                                          |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| · <b>14.1 Número ONU</b>                                                                            | UN2810                                                                                   |
| · <b>ADR, IMDG, IATA</b>                                                                            |                                                                                          |
| · <b>14.2 Designação oficial de transporte da ONU</b>                                               | 2810 LÍQUIDO ORGÂNICO, TÓXICO, N.S.A. (acrilato de 2-hidroxiétilo, Benzoin Methyl Ether) |
| · <b>ADR</b>                                                                                        | TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)            |
| · <b>IMDG, IATA</b>                                                                                 |                                                                                          |
| · <b>14.3 Classes de perigo para efeitos de transporte</b>                                          |                                                                                          |
| · <b>ADR, IMDG, IATA</b>                                                                            |                                                                                          |
|                  |                                                                                          |
| · <b>Classe</b>                                                                                     | 6.1 Matérias tóxicas                                                                     |
| · <b>Rótulo</b>                                                                                     | 6.1                                                                                      |
| · <b>14.4 Grupo de embalagem</b>                                                                    |                                                                                          |
| · <b>ADR, IMDG, IATA</b>                                                                            | III                                                                                      |
| · <b>14.5 Perigos para o ambiente:</b>                                                              | Não aplicável.                                                                           |
| · <b>14.6 Precauções especiais para o utilizador</b>                                                | Atenção: Matérias tóxicas                                                                |
| · <b>Nº Kemler:</b>                                                                                 | 60                                                                                       |
| · <b>Nº EMS:</b>                                                                                    | F-A, S-A                                                                                 |
| · <b>Stowage Category</b>                                                                           | A                                                                                        |
| · <b>Stowage Code</b>                                                                               | SW2 Clear of living quarters.                                                            |
| · <b>14.7 Transporte a granel em conformidade com o anexo II da Convenção MARPOL e o Código IBC</b> | Não aplicável.                                                                           |
| · <b>Transporte/outras informações:</b>                                                             |                                                                                          |
| · <b>ADR</b>                                                                                        | 5L                                                                                       |
| · <b>Quantidades Limitadas (LQ)</b>                                                                 | Código: E1                                                                               |
| · <b>Quantidades exceptuadas (EQ)</b>                                                               | Quantidade líquida máxima por embalagem interior: 30 ml                                  |
|                                                                                                     | Quantidade líquida máxima por embalagem exterior: 1000 ml                                |
| · <b>Categoria de transporte</b>                                                                    | 2                                                                                        |

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|                                        |                                                                                                                  |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------|
| · <b>Código de restrição em túneis</b> | <b>E</b>                                                                                                         |
| · <b>IMDG</b>                          |                                                                                                                  |
| · <b>Limited quantities (LQ)</b>       | 5L                                                                                                               |
| · <b>Excepted quantities (EQ)</b>      | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>UN "Model Regulation":</b>        | UN 2810 LÍQUIDO ORGÂNICO, TÓXICO, N.S.A.<br>(ACRILATO DE 2-HIDROXIETILO, BENZOIN METHYL<br>ETHER), 6.1, III      |

### SECÇÃO 15: Informação sobre regulamentação

- **15.1 Regulamentação/legislação específica para a substância ou mistura em matéria de saúde, segurança e ambiente**
- **Diretiva 2012/18/UE**
- **Substâncias perigosas designadas - ANEXO I** Nenhum dos componentes se encontra listado.
- **Categoria "Seveso" H2 TOXICIDADE AGUDA**
- **Quantidades-limiar (em toneladas), para a aplicação de requisitos de nível inferior 50 t**
- **Quantidades-limiar (em toneladas), para a aplicação de requisitos de nível superior 200 t**
- **Regulamento (CE) n.º 1907/2006 ANEXO XVII** Condições de limitação: 3
- **15.2 Avaliação da segurança química:** Não foi realizada nenhuma Avaliação de Segurança Química.

### SECÇÃO 16: Outras informações

As informações fornecidas baseiam-se no estado actual dos nossos conhecimentos, embora não representem uma garantia das propriedades do produto e não fundamentam uma relação contratual.

- **Frases relevantes**  
H301 Tóxico por ingestão.  
H302 Nocivo por ingestão.  
H311 Tóxico em contacto com a pele.  
H314 Provoca queimaduras na pele e lesões oculares graves.  
H315 Provoca irritação cutânea.  
H317 Pode provocar uma reacção alérgica cutânea.  
H319 Provoca irritação ocular grave.  
H332 Nocivo por inalação.  
H400 Muito tóxico para os organismos aquáticos.
- **Abreviaturas e acrónimos:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 3: Toxicidade aguda – Categoria 3  
Acute Tox. 4: Toxicidade aguda – Categoria 4  
Skin Corr. 1B: Corrosão/irritação cutânea – Categoria 1B  
Skin Irrit. 2: Corrosão/irritação cutânea – Categoria 2  
Eye Dam. 1: Lesões oculares graves/irritação ocular – Categoria 1

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*Eye Irrit. 2: Lesões oculares graves/irritação ocular – Categoria 2*

*Skin Sens. 1: Sensibilização cutânea – Categoria 1*

*Aquatic Acute 1: Perigoso para o ambiente aquático - perigo agudo para o ambiente aquático – Categoria 1*

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PT

# Ficha de datos de seguridad según 1907/2006/CE, Artículo 31

fecha de impresión 10.09.2018

Revisión: 10.09.2018

## SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

- **1.1 Identificador del producto**
- **Nombre comercial:** LOWICRYL MONOSTEP K4M POLAR
- **Número del artículo:** 14335
- **1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados**  
No existen más datos relevantes disponibles.
- **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio
- **1.3 Datos del proveedor de la ficha de datos de seguridad**
- **Fabricante/distribuidor:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Aname**  
C/ Perez Galdos no. 2  
28693 Quijorna  
Madrid, Spain  
Tel: +34.91.816.89.50  
Fax: +34.91.816.85.94  
email: ventas@aname.es
- **Área de información:** Product safety department
- **1.4 Teléfono de emergencia:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## SECCIÓN 2: Identificación de los peligros

- **2.1 Clasificación de la sustancia o de la mezcla**
- **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS06 calavera y tibias cruzadas

Acute Tox. 3 H301 Tóxico en caso de ingestión.



GHS05 corrosión

Skin Corr. 1B H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

Eye Dam. 1 H318 Provoca lesiones oculares graves.



GHS07

Skin Sens. 1 H317 Puede provocar una reacción alérgica en la piel.

- **2.2 Elementos de la etiqueta**
- **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008**  
El producto se ha clasificado y etiquetado de conformidad con el reglamento CLP.

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# Ficha de datos de seguridad

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## Pictogramas de peligro



GHS05 GHS06

## Palabra de advertencia Peligro

### Componentes peligrosos a indicar en el etiquetaje:

Benzoin Methyl Ether  
acrilato de 2-hidroxietilo  
mequinol

### Indicaciones de peligro

H301 Tóxico en caso de ingestión.  
H314 Provoca quemaduras graves en la piel y lesiones oculares graves.  
H317 Puede provocar una reacción alérgica en la piel.

### Consejos de prudencia

P301+P310 **EN CASO DE INGESTIÓN:** Llamar inmediatamente a un CENTRO DE TOXICOLOGÍA/ médico.  
P321 Se necesita un tratamiento específico (ver en esta etiqueta).  
P303+P361+P353 **EN CASO DE CONTACTO CON LA PIEL (o el pelo):** Quitar inmediatamente todas las prendas contaminadas. Aclararse la piel con agua/ ducharse.  
P305+P351+P338 **EN CASO DE CONTACTO CON LOS OJOS:** Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.  
P362+P364 Quitar las prendas contaminadas y lavarlas antes de volver a usarlas.  
P405 Guardar bajo llave.  
P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/ internacional.

### 2.3 Otros peligros

### Resultados de la valoración PBT y mPmB

PBT: No aplicable.  
mPmB: No aplicable.

## SECCIÓN 3: Composición/información sobre los componentes

### 3.2 Caracterización química: Mezclas

Descripción: Mezcla formada por las sustancias especificadas a continuación con adiciones no peligrosas.

#### Componentes peligrosos:

|                                      |                                                                                                                  |           |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 3524-62-7<br>EINECS: 222-538-7  | Benzoin Methyl Ether<br>Acute Tox. 3, H301; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319          | >25-≤50%  |
| CAS: 27813-02-1<br>EINECS: 248-666-3 | ácido metacrílico, monoéster con propano-1,2-diol<br>Skin Irrit. 2, H315; Eye Irrit. 2, H319                     | >10-≤25%  |
| CAS: 818-61-1<br>EINECS: 212-454-9   | acrilato de 2-hidroxietilo<br>Acute Tox. 3, H311; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Skin Sens. 1, H317 | >2,5-≤10% |
| CAS: 150-76-5<br>EINECS: 205-769-8   | mequinol<br>Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317                                           | ≤2,5%     |

Indicaciones adicionales: El texto de los posibles riesgos aquí indicados se puede consultar en el capítulo 16.

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### SECCIÓN 4: Primeros auxilios

#### · 4.1 Descripción de los primeros auxilios

##### · Instrucciones generales:

Quitarse de inmediato toda prenda contaminada con el producto.

Los síntomas de intoxicación pueden presentarse después de muchas horas, por lo que se requiere una supervisión médica durante un mínimo de 48 horas después del accidente.

En caso de respiración irregular o apnea (paro respiratorio), hágase la respiración artificial.

##### · En caso de inhalación del producto:

Suministrar suficiente aire fresco y, para mayor seguridad, consultar el médico.

Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.

##### · En caso de contacto con la piel: Lavar inmediatamente con agua y jabón y enjuagar bien.

##### · En caso de con los ojos:

Limpia los ojos abiertos durante varios minutos con agua corriente y consultar un médico.

##### · En caso de ingestión:

No provocar el vómito y solicitar asistencia médica inmediata.

Beber mucha agua a respirar aire fresco. Solicitar asistencia médica inmediatamente.

#### · 4.2 Principales síntomas y efectos, agudos y retardados No existen más datos relevantes disponibles.

#### · 4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente

No existen más datos relevantes disponibles.

### SECCIÓN 5: Medidas de lucha contra incendios

#### · 5.1 Medios de extinción

##### · Sustancias extintoras apropiadas:

CO<sub>2</sub>, polvo extintor o chorro de agua rociada. Combatir incendios mayores con chorro de agua rociada o espuma resistente al alcohol.

#### · 5.2 Peligros específicos derivados de la sustancia o la mezcla No existen más datos relevantes disponibles.

#### · 5.3 Recomendaciones para el personal de lucha contra incendios

#### · Equipo especial de protección: No se requieren medidas especiales.

### SECCIÓN 6: Medidas en caso de vertido accidental

#### · 6.1 Precauciones personales, equipo de protección y procedimientos de emergencia

Llevar puesto equipo de protección. Mantener alejadas las personas sin protección.

#### · 6.2 Precauciones relativas al medio ambiente:

Al penetrar en las aguas o en el alcantarillado, avisar a las autoridades pertinentes.

Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.

#### · 6.3 Métodos y material de contención y de limpieza:

Quitar con material absorbente (arena, kieselgur, aglutinante de ácidos, aglutinante universal, aserrín).

Utilizar un neutralizador.

Desechar el material contaminado como vertido según ítem 13.

Asegurar suficiente ventilación.

#### · 6.4 Referencia a otras secciones

Ver capítulo 7 para mayor información sobre una manipulación segura.

Ver capítulo 8 para mayor información sobre el equipo personal de protección.

Para mayor información sobre cómo desechar el producto, ver capítulo 13.

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### SECCIÓN 7: Manipulación y almacenamiento

- **7.1 Precauciones para una manipulación segura**  
Asegurar suficiente ventilación /aspiración en el puesto de trabajo.  
Evitar la formación de aerosoles.
- **Prevención de incendios y explosiones:** No se requieren medidas especiales.
- **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** No se requieren medidas especiales.
- **Normas en caso de un almacenamiento conjunto:** No es necesario.
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**  
Mantener el recipiente cerrado herméticamente.
- **7.3 Usos específicos finales** No existen más datos relevantes disponibles.

### SECCIÓN 8: Controles de exposición/protección individual

- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**  
Sin datos adicionales, ver punto 7.

#### · 8.1 Parámetros de control

- **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**

**150-76-5 mequinol**

|     |                                              |
|-----|----------------------------------------------|
| LEP | Valor de larga duración: 5 mg/m <sup>3</sup> |
| Sen |                                              |

- **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.

#### · 8.2 Controles de la exposición

##### · **Equipo de protección individual:**

##### · **Medidas generales de protección e higiene:**

Mantener alejado de alimentos, bebidas y alimentos para animales.  
Quitarse de inmediato la ropa ensuciada o impregnada.  
Lavarse las manos antes de las pausas y al final del trabajo.  
Evitar el contacto con los ojos.  
Evitar el contacto con los ojos y la piel.

##### · **Protección respiratoria:**

Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.

##### · **Protección de manos:**



Guantes de protección

El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.

Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.

Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.

##### · **Material de los guantes**

La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro. Teniendo en cuenta que el producto está fabricado a partir de diferentes materiales, su calidad no puede ser evaluada de antemano, de modo que los guantes deberán ser controlados antes de su utilización.

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· **Tiempo de penetración del material de los guantes**

El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.

· **Protección de ojos:**



Gafas de protección herméticas

### SECCIÓN 9: Propiedades físicas y químicas

· **9.1 Información sobre propiedades físicas y químicas básicas**

· **Datos generales**

· **Aspecto:**

Forma:

Líquido

Color:

Incoloro

· **Olor:**

Intenso

· **Umbral olfativo:**

No determinado.

· **valor pH:**

No determinado.

· **Cambio de estado**

Punto de fusión/punto de congelación:

Indeterminado.

Punto inicial de ebullición e intervalo de ebullición: 246 °C

· **Punto de inflamación:**

90 °C

· **Inflamabilidad (sólido, gas):**

No aplicable.

· **Temperatura de descomposición:**

No determinado.

· **Temperatura de auto-inflamación:**

El producto no es autoinflamable.

· **Propiedades explosivas:**

No determinado.

· **Límites de explosión:**

Inferior:

No determinado.

Superior:

No determinado.

· **Presión de vapor:**

No determinado.

· **Densidad:**

Indeterminado.

· **Densidad relativa**

No determinado.

· **Densidad de vapor**

No determinado.

· **Tasa de evaporación:**

No determinado.

· **Solubilidad en / miscibilidad con agua:**

Poco o no mezclable.

· **Coeficiente de reparto: n-octanol/agua:**

No determinado.

· **Viscosidad:**

Dinámica:

No determinado.

Cinemática:

No determinado.

· **Concentración del disolvente:**

VOC (CE)

0,00 %

Contenido de cuerpos sólidos:

0,0 %

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· 9.2 Otros datos

No existen más datos relevantes disponibles.

### SECCIÓN 10: Estabilidad y reactividad

- **10.1 Reactividad** No existen más datos relevantes disponibles.
- **10.2 Estabilidad química**
- **Descomposición térmica / condiciones que deben evitarse:** No se descompone al emplearse adecuadamente.
- **10.3 Posibilidad de reacciones peligrosas** No se conocen reacciones peligrosas.
- **10.4 Condiciones que deben evitarse** No existen más datos relevantes disponibles.
- **10.5 Materiales incompatibles:** No existen más datos relevantes disponibles.
- **10.6 Productos de descomposición peligrosos:** No se conocen productos de descomposición peligrosos.

### SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda**  
Tóxico en caso de ingestión.
- **Efecto estimulante primario:**
- **Corrosión o irritación cutáneas**  
Provoca quemaduras graves en la piel y lesiones oculares graves.
- **Lesiones o irritación ocular graves**  
Provoca lesiones oculares graves.
- **Sensibilización respiratoria o cutánea**  
Puede provocar una reacción alérgica en la piel.
- **Efectos CMR (carcinogenicidad, mutagenicidad y toxicidad para la reproducción)**
- **Mutagenicidad en células germinales**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Carcinogenicidad** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad para la reproducción** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición única**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición repetida**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Peligro de aspiración** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

### SECCIÓN 12: Información ecológica

- **12.1 Toxicidad**
- **Toxicidad acuática:** No existen más datos relevantes disponibles.
- **12.2 Persistencia y degradabilidad** No existen más datos relevantes disponibles.
- **12.3 Potencial de bioacumulación** No existen más datos relevantes disponibles.
- **12.4 Movilidad en el suelo** No existen más datos relevantes disponibles.
- **Efectos ecotóxicos:**
- **Observación:** Tóxico para peces.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**  
Nivel de riesgo para el agua 2 (autoclasiificación): peligroso para el agua  
No dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.  
En estado no diluido o no neutralizado, no verter en el alcantarillado o en otros sistemas de desagüe.  
Una cantidad mínima vertida en el subsuelo ya representa un peligro para el agua potable.

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Vertido en aguas superficiales, también es tóxico para los peces y el plancton.  
tóxico para organismos acuáticos

· **12.5 Resultados de la valoración PBT y mPmB**

· **PBT:** No aplicable.

· **mPmB:** No aplicable.

· **12.6 Otros efectos adversos** No existen más datos relevantes disponibles.

## SECCIÓN 13: Consideraciones relativas a la eliminación

· **13.1 Métodos para el tratamiento de residuos**

· **Recomendación:** No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.

· **Embalajes sin limpiar:**

· **Recomendación:** Eliminar conforme a las disposiciones oficiales.

## SECCIÓN 14: Información relativa al transporte

· **14.1 Número ONU**

· **ADR, IMDG, IATA**

UN2810

· **14.2 Designación oficial de transporte de las Naciones Unidas**

· **ADR**

2810 LÍQUIDO TÓXICO, ORGÁNICO, N.E.P. (acrilato de 2-hidroxietilo, Benzoin Methyl Ether)

· **IMDG, IATA**

TOXIC LIQUID, ORGANIC, N.O.S. (2-hydroxyethyl acrylate, Benzoin Methyl Ether)

· **14.3 Clase(s) de peligro para el transporte**

· **ADR, IMDG, IATA**



· **Clase**

6.1 Materias tóxicas

· **Etiqueta**

6.1

· **14.4 Grupo de embalaje**

· **ADR, IMDG, IATA**

III

· **14.5 Peligros para el medio ambiente:**

No aplicable.

· **14.6 Precauciones particulares para los usuarios**

· **Número Kemler:**

Atención: Materias tóxicas

60

· **Número EMS:**

F-A,S-A

· **Stowage Category**

A

· **Stowage Code**

SW2 Clear of living quarters.

· **14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC**

No aplicable.

· **Transporte/datos adicionales:**

· **ADR**

· **Cantidades limitadas (LQ)**

5L

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|                                               |                                                                                                                      |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| · <b>Cantidades exceptuadas (EQ)</b>          | Código: E1<br>Cantidad neta máxima por envase interior: 30 ml<br>Cantidad neta máxima por embalaje exterior: 1000 ml |
| · <b>Categoría de transporte</b>              | 2                                                                                                                    |
| · <b>Código de restricción del túnel</b>      | E                                                                                                                    |
| · <b>IMDG</b>                                 |                                                                                                                      |
| · <b>Limited quantities (LQ)</b>              | 5L                                                                                                                   |
| · <b>Excepted quantities (EQ)</b>             | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml     |
| · <b>"Reglamentación Modelo" de la UNECE:</b> | UN 2810 LÍQUIDO TÓXICO, ORGÁNICO, N.E.P.<br>(ACRILATO DE 2-HIDROXIETILO, BENZOIN METHYL ETHER), 6.1, III             |

### SECCIÓN 15: Información reglamentaria

- **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**
- **Directiva 2012/18/UE**
- **Sustancias peligrosas nominadas - ANEXO I** ninguno de los componentes está incluido en una lista
- **Categoría Seveso H2 TOXICIDAD AGUDA**
- **Cantidad umbral (toneladas) a efectos de aplicación de los requisitos de nivel inferior** 50 t
- **Cantidad umbral (toneladas) a efectos de aplicación de los requisitos de nivel superior** 200 t
- **REGLAMENTO (CE) n° 1907/2006 ANEXO XVII Restricciones:** 3
- **15.2 Evaluación de la seguridad química:** Una evaluación de la seguridad química no se ha llevado a cabo.

### SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

- **Frases relevantes**  
H301 Tóxico en caso de ingestión.  
H302 Nocivo en caso de ingestión.  
H311 Tóxico en contacto con la piel.  
H314 Provoca quemaduras graves en la piel y lesiones oculares graves.  
H315 Provoca irritación cutánea.  
H317 Puede provocar una reacción alérgica en la piel.  
H319 Provoca irritación ocular grave.  
H332 Nocivo en caso de inhalación.  
H400 Muy tóxico para los organismos acuáticos.
- **Abreviaturas y acrónimos:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

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*Acute Tox. 3: Toxicidad aguda – Categoría 3*

*Acute Tox. 4: Toxicidad aguda – Categoría 4*

*Skin Corr. 1B: Corrosión o irritación cutáneas – Categoría 1B*

*Skin Irrit. 2: Corrosión o irritación cutáneas – Categoría 2*

*Eye Dam. 1: Lesiones oculares graves o irritación ocular – Categoría 1*

*Eye Irrit. 2: Lesiones oculares graves o irritación ocular – Categoría 2*

*Skin Sens. 1: Sensibilización cutánea – Categoría 1*

*Aquatic Acute 1: Peligroso para el medio ambiente acuático - peligro acuático agudo – Categoría 1*

ES