

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/10/2020

Reviewed on 04/10/2020

## 1 Identification

- **Product identifier**
- **Trade name:** TECHNOVIT 8100 - LIQUID
- **Article number:** 14654
- **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: info@emsdiasum.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**



Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2A H319 Causes serious eye irritation.  
Skin Sens. 1 H317 May cause an allergic skin reaction.

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



- **Signal word** Warning
- **Hazard-determining components of labeling:**  
2-hydroxyethyl methacrylate
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Wash thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves / eye protection / face protection.  
If on skin: Wash with plenty of water.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.

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Take off contaminated clothing and wash it before reuse.

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

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 1

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:**

868-77-9	2-hydroxyethyl methacrylate	>50-≤100%
109-59-1	2-isopropoxyethanol	>2.5-≤10%

### 4 First-aid measures

· **Description of first aid measures**

· **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. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult 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.

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## 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** Not required.
- **Environmental precautions:** 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).  
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.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

868-77-9	2-hydroxyethyl methacrylate	1.9 mg/m <sup>3</sup>
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- **PAC-2:**

868-77-9	2-hydroxyethyl methacrylate	21 mg/m <sup>3</sup>
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- **PAC-3:**

868-77-9	2-hydroxyethyl methacrylate	1,000 mg/m <sup>3</sup>
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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.

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- **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 remaining constituent has no known exposure limits.

**109-59-1 2-isopropoxyethanol**

TLV	Long-term value: 106 mg/m <sup>3</sup> , 25 ppm
	Skin

- **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 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:** Fluid

**Color:** Colorless

· **Odor:** Characteristic

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· <b>Odor threshold:</b>	Not determined.
· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b> <b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	142 °C (287.6 °F)
· <b>Flash point:</b>	97 °C (206.6 °F)
· <b>Flammability (solid, gaseous):</b>	Not flammable.
· <b>Ignition temperature:</b>	345 °C (653 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b> <b>Lower:</b>	1.6 Vol %
<b>Upper:</b>	13 Vol %
· <b>Vapor pressure at 20 °C (68 °F):</b>	3.5 hPa (2.6 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	1 g/cm <sup>3</sup> (8.345 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with</b> <b>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 % 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.

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## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

**868-77-9 2-hydroxyethyl methacrylate**

Oral	LD50	5,050 mg/kg (rat)
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- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:** Irritating effect.

- **Sensitization:** Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

- **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.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **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.

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

## 14 Transport information

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b>   | Void            |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>UN proper shipping name</b>   | Void            |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>Transport hazard class(es)</b>  | Void            |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void            |
| · <b>Class</b>   | Void            |
| · <b>Packing group</b>   | Void            |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>Environmental hazards:</b>  | Not applicable. |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Void            |

## 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 components have the value ACTIVE.

- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **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.

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- **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**



GHS07

- **Signal word** Warning

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

2-hydroxyethyl methacrylate

- **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

- **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

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

Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

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.

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

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** 04/10/2020 / -

- **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

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*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)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**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******Skin Irrit. 2: Skin corrosion/irritation – Category 2******Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A******Skin Sens. 1: Skin sensitisation – Category 1***

US

# Safety Data Sheet

## according to WHS Regulations

Printing date 10.04.2020

Revision: 10.04.2020

### 1 Identification

- **Product identifier**
- **Trade name:** TECHNOVIT 8100 - LIQUID
- **Article number:** 14654
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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](http://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](http://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**



GHS07

Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2A H319 Causes serious eye irritation.  
Skin Sens. 1 H317 May cause an allergic skin reaction.

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



GHS07

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- **Signal word** Warning
- **Hazard-determining components of labelling:**  
2-hydroxyethyl methacrylate
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves / eye protection / face protection.  
**IF ON SKIN:** Wash with plenty of water.  
**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.  
Specific treatment (see on this label).  
If eye irritation persists: Get medical advice/attention.  
Wash contaminated clothing before reuse.  
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:**

868-77-9	2-hydroxyethyl methacrylate	>50-≤100%
109-59-1	2-isopropoxyethanol	>2.5-≤10%

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

### 4 First Aid Measures

- **Description of first aid measures**
- **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. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **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** Not required.
- **Environmental precautions:** 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).  
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.

### 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:**

**109-59-1 2-isopropoxyethanol**

WES | Long-term value: 106 mg/m<sup>3</sup>, 25 ppm

- **Additional information:** The lists valid during the making were used as basis.

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- **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 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

## 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.
- **pH-value:** Not determined.
- **Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	142 °C
- **Flash point:** 97 °C
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** 345 °C

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· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	1.6 Vol %
Upper:	13 Vol %
· <b>Vapour pressure at 20 °C:</b>	3.5 hPa
· <b>Density at 20 °C:</b>	1 g/cm <sup>3</sup>
· <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>	
Dynamic:	Not determined.
Kinematic:	Not determined.
· <b>Solvent content:</b>	
VOC (EC)	0.00 %
Solids content:	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**

· **LD/LC50 values relevant for classification:**

**868-77-9 2-hydroxyethyl methacrylate**

Oral LD50 5,050 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation** Sensitisation possible through skin contact.

(Contd. on page 6)

AU

## Safety Data Sheet according to WHS Regulations

Printing date 10.04.2020

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Trade name: **TECHNOVIT 8100 - LIQUID**

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· **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:

Irritant

### 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.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **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

· <b>UN-Number</b>	
· <b>ADG, IMDG, IATA</b>	not regulated
· <b>UN proper shipping name</b>	
· <b>ADG, IMDG, IATA</b>	not regulated
· <b>Transport hazard class(es)</b>	
· <b>ADG, ADN, IMDG, IATA</b>	
· <b>Class</b>	not regulated
· <b>Packing group</b>	
· <b>ADG, IMDG, IATA</b>	not regulated
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.

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# Safety Data Sheet

## according to WHS Regulations

Printing date 10.04.2020

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Trade name: **TECHNOVIT 8100 - LIQUID**

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· UN "Model Regulation":	not regulated
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### 15 Regulatory information

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

- **Australian Inventory of Chemical Substances**

All ingredients are listed.

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

868-77-9	2-hydroxyethyl methacrylate	S5
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- **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

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

- **Hazard pictograms**



GHS07

- **Signal word** Warning

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

2-hydroxyethyl methacrylate

- **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

- **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

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

Wear protective gloves / eye protection / face protection.

IF ON SKIN: Wash with plenty of water.

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.

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

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.

- **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.

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**Safety Data Sheet**  
according to WHS Regulations

Printing date 10.04.2020

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**Trade name: TECHNOVIT 8100 - LIQUID**

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**· 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)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Skin Irrit. 2: Skin corrosion/irritation – Category 2*

*Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A*

*Skin Sens. 1: Skin sensitisation – Category 1*

AU

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 04/10/2020

Reviewed on 04/10/2020

### 1 Identification

- **Product identifier**
- **Trade name:** TECHNOVIT 8100 - LIQUID
- **Article number:** 14654
- **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: info@emsdiasum.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 identification

- **Classification of the substance or mixture**



GHS07

- *Skin Irritation - Category 2 H315 Causes skin irritation.*
- *Eye Irritation - Category 2A H319 Causes serious eye irritation.*
- *Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.*

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



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**  
 2-hydroxyethyl methacrylate
- **Hazard statements**  
 Causes skin irritation.  
 Causes serious eye irritation.  
 May cause an allergic skin reaction.
- **Precautionary statements**  
 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 Wash thoroughly after handling.  
 Contaminated work clothing should not be allowed out of the workplace.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 If on skin: Wash with plenty of water.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 04/10/2020

Reviewed on 04/10/2020

**Trade name: TECHNOVIT 8100 - LIQUID**

(Contd. of page 1)

Take off contaminated clothing and wash it before reuse.

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

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



### 3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

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

· **Dangerous components:**

868-77-9	2-hydroxyethyl methacrylate	80-100% w/w *
109-59-1	2-isopropoxyethanol	5-10% w/w *

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

### 4 First-aid measures

· **Description of first aid measures**

· **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. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult 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.

(Contd. on page 3)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 04/10/2020

Reviewed on 04/10/2020

**Trade name: TECHNOVIT 8100 - LIQUID**

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** 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).  
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.

### 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:**

**109-59-1 2-isopropoxyethanol**

EL TWA: 25 ppm

Skin

EV TWA: 105 mg/m<sup>3</sup>, 25 ppm

- **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 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.

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 04/10/2020

Reviewed on 04/10/2020

Trade name: **TECHNOVIT 8100 - LIQUID**

(Contd. of page 3)

· **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:**

<b>Form:</b>	Fluid
<b>Color:</b>	Colorless
<b>Odor:</b>	Characteristic
<b>Odor threshold:</b>	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	142 °C

· **Flash point:** 97 °C

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

· **Ignition temperature:** 345 °C

· **Decomposition temperature:** Not determined.

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

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

<b>Lower:</b>	1.6 Vol %
<b>Upper:</b>	13 Vol %

· **Vapor pressure at 20 °C:** 3.5 hPa

· **Density at 20 °C:** 1 g/cm<sup>3</sup>

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CA

## Safety Data Sheet according to HPR, Schedule 1

Printing date 04/10/2020

Reviewed on 04/10/2020

Trade name: **TECHNOVIT 8100 - LIQUID**

(Contd. of page 4)

· <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>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:**

#### · **LD/LC50 values that are relevant for classification:**

868-77-9 2-hydroxyethyl methacrylate

Oral	LD50	5,050 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

- **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.

CA

(Contd. on page 6)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 04/10/2020

Reviewed on 04/10/2020

Trade name: **TECHNOVIT 8100 - LIQUID**

(Contd. of page 5)

### 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.
- **Additional ecological information:**
- **General notes:**  
*Water hazard class 1 (Self-assessment): slightly hazardous for water*  
*Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.*
- **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

· <b>UN-Number</b>	
· <b>DOT/TDG, ADR, IMDG, IATA</b>	Void
· <b>UN proper shipping name</b>	
· <b>DOT/TDG, ADR, IMDG, IATA</b>	Void
· <b>Transport hazard class(es)</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	
· <b>Class</b>	Void
· <b>Packing group</b>	
· <b>DOT/TDG, ADR, IMDG, IATA</b>	Void
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Void

CA

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 04/10/2020

Reviewed on 04/10/2020

Trade name: **TECHNOVIT 8100 - LIQUID**

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### 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 components have the value ACTIVE.

· **Canadian substance listings:**

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

All ingredients are listed.

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

None of the ingredients is listed.

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

All ingredients are listed.

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

· **Hazard pictograms**



GHS07

· **Signal word** Warning

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

2-hydroxyethyl methacrylate

· **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

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

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

If on skin: Wash with plenty of water.

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.

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

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

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

CA

(Contd. on page 8)



**Safety Data Sheet**  
**according to HPR, Schedule 1**

Printing date 04/10/2020

Reviewed on 04/10/2020

**Trade name: TECHNOVIT 8100 - LIQUID**

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**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** 04/10/2020 / -

· **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)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

CA

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 10.04.2020

Revision: 10.04.2020

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

- **Product identifier**
- **Trade name:** TECHNOVIT 8100 - LIQUID
- **Article number:** 14654
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazards identification

- **Classification of the substance or mixture**



Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2A H319 Causes serious eye irritation.  
Skin Sens. 1 H317 May cause an allergic skin reaction.

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



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
2-hydroxyethyl methacrylate
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wear protective gloves / eye protection / face protection.  
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.

(Contd. on page 2)

# Safety data sheet

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

Printing date 10.04.2020

Revision: 10.04.2020

Trade name: **TECHNOVIT 8100 - LIQUID**




(Contd. of page 1)

- If eye irritation persists: Get medical advice/attention.  
 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/information on ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

868-77-9	2-hydroxyethyl methacrylate  Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	>50-≤100%
109-59-1	2-isopropoxyethanol  Flam. Liq. 3, H226;  Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	>2.5-≤10%

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

### 4 First aid measures

- **Description of first aid measures**
- **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. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult 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 Firefighting 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** Not required.
- **Environmental precautions:** 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).  
 Ensure adequate ventilation.

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# Safety data sheet

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

Printing date 10.04.2020

Revision: 10.04.2020

Trade name: **TECHNOVIT 8100 - LIQUID**

(Contd. of page 2)

- **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.

### 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/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:**  
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.
- **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 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.

(Contd. on page 4)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 10.04.2020

Revision: 10.04.2020

Trade name: **TECHNOVIT 8100 - LIQUID**

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- **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:**

· <b>Form:</b>	Fluid
· <b>Colour:</b>	Colourless
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.

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

- **Change in condition**

· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Initial boiling point and boiling range:</b>	142 °C

- **Flash point:** 97 °C

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

- **Ignition temperature:** 345 °C

- **Decomposition temperature:** Not determined.

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

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**

· <b>Lower:</b>	1.6 Vol %
· <b>Upper:</b>	13 Vol %

- **Vapour pressure at 20 °C:** 3.5 hPa

· <b>Density at 20 °C:</b>	1 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.

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

Not miscible or difficult to mix.

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

- **Viscosity:**

· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.

- **Solvent content:**

- **VOC (EC)** 0.00 %

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<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**

· **LD/LC50 values relevant for classification:**

868-77-9 2-hydroxyethyl methacrylate

Oral	LD50	5,050 mg/kg (rat)
------	------	-------------------

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Irritating effect.
- **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:  
Irritant

### 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.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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### 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

· <b>UN-Number</b> · <b>ADR, IMDG, IATA</b>	not regulated
· <b>UN proper shipping name</b> · <b>ADR, IMDG, IATA</b>	not regulated
· <b>Transport hazard class(es)</b> · <b>ADR, ADN, IMDG, IATA</b> · <b>Class</b>	not regulated
· <b>Packing group</b> · <b>ADR, IMDG, IATA</b>	not regulated
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	not regulated

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
2-hydroxyethyl methacrylate
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.

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**Trade name: TECHNOVIT 8100 - LIQUID**

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- Wear protective gloves / eye protection / face protection.*  
*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.*  
*If eye irritation persists: Get medical advice/attention.*  
*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.
  - **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.*

- **Relevant phrases**

- H226 Flammable liquid and vapour.*
- H312 Harmful in contact with skin.*
- H315 Causes skin irritation.*
- H317 May cause an allergic skin reaction.*
- H319 Causes serious eye irritation.*
- H332 Harmful if inhaled.*

- **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)*
- LC50: Lethal concentration, 50 percent*
- LD50: Lethal dose, 50 percent*
- PBT: Persistent, Bioaccumulative and Toxic*
- vPvB: very Persistent and very Bioaccumulative*
- Flam. Liq. 3: Flammable liquids – Category 3*
- Acute Tox. 4: Acute toxicity - dermal – Category 4*
- Skin Irrit. 2: Skin corrosion/irritation – Category 2*
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*
- Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A*
- Skin Sens. 1: Skin sensitisation – Category 1*



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

- **1.1 Product identifier**
- **Trade name:** TECHNOVIT 8100 - LIQUID
- **Article number:** 14654
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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**



GHS07

- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2 H319 Causes serious eye irritation.
- 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**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
2-hydroxyethyl methacrylate
- **Hazard statements**  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves / eye protection / face protection.

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# Safety data sheet

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

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Trade name: **TECHNOVIT 8100 - LIQUID**

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P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 **If skin irritation or rash occurs:** Get medical advice/attention.

P337+P313 **If eye irritation persists:** Get medical advice/attention.

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: 868-77-9	2-hydroxyethyl methacrylate	>50-≤100%
EINECS: 212-782-2	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 109-59-1	2-isopropoxyethanol	>2.5-≤10%
EINECS: 203-685-6	⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	

- **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**
- **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. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **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** Not required.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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

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Trade name: **TECHNOVIT 8100 - LIQUID**

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- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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.
- **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 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

## SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

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

- **Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	142 °C

- **Flash point:** 97 °C

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

- **Ignition temperature:** 345 °C

- **Decomposition temperature:** Not determined.

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

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**

<b>Lower:</b>	1.6 Vol %
<b>Upper:</b>	13 Vol %

- **Vapour pressure at 20 °C:** 3.5 hPa

<b>Density at 20 °C:</b>	1 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.

- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

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

- **Viscosity:**
- Dynamic:** Not determined.

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<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.

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

**868-77-9 2-hydroxyethyl methacrylate**

Oral	LD50	5,050 mg/kg (rat)
------	------	-------------------

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **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.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

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Trade name: **TECHNOVIT 8100 - LIQUID**

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- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |  |                 |
|--|-----------------|
| · <b>14.1 UN-Number</b>  |                 |
| · <b>ADR, IMDG, IATA</b>   | not regulated   |
| · <b>14.2 UN proper shipping name</b>  |                 |
| · <b>ADR, IMDG, IATA</b>   | not regulated   |
| · <b>14.3 Transport hazard class(es)</b>   |                 |
| · <b>ADR, ADN, IMDG, IATA</b>  |                 |
| · <b>Class</b>   | not regulated   |
| · <b>14.4 Packing group</b>  |                 |
| · <b>ADR, IMDG, IATA</b>   | not regulated   |
| · <b>14.5 Environmental hazards:</b>   | Not applicable. |
| · <b>14.6 Special precautions for user</b>                                       | Not applicable. |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | not regulated   |

### 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.
- **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**  
H226 Flammable liquid and vapour.

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*H312 Harmful in contact with skin.**H315 Causes skin irritation.**H317 May cause an allergic skin reaction.**H319 Causes serious eye irritation.**H332 Harmful if inhaled.***· 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)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 3: Flammable liquids – Category 3**Acute Tox. 4: Acute toxicity - dermal – Category 4**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**Skin Sens. 1: Skin sensitisation – Category 1*

GB

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.04.2020

Herziening van: 10.04.2020

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

- **1.1 Productidentificatie**
- **Handelsnaam:** TECHNOVIT 8100 - LIQUID
- **Artikelnummer:** 14654
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Aurion**  
Binnenhaven 5  
6709 PD Wageningen  
The Netherlands  
Tel: 31 317 415094  
Fax: 31 317 415955  
email: [info@aurion.nl](mailto: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**



GHS07

- **Skin Irrit. 2 H315** Veroorzaakt huidirritatie.
- **Eye Irrit. 2 H319** Veroorzaakt ernstige oogirritatie.
- **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.
- **Gevarenpictogrammen**



GHS07

- **Signaalwoord** Waarschuwing
- **Gevaaraanduidende componenten voor de etikettering:**  
2-hydroxyethylmethacrylaat

(Vervolg op blz. 2)



# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 10.04.2020

Herziening van: 10.04.2020

**Handelsnaam: TECHNOVIT 8100 - LIQUID**

(Vervolg van blz. 1)

- **Gevarenaanduidingen**

- H315 Veroorzaakt huidirritatie.
- H319 Veroorzaakt ernstige oogirritatie.
- H317 Kan een allergische huidreactie veroorzaken.

- **Veiligheidsaanbevelingen**

- P261 Inademing van stof/rook/gas/nevel/damp/spuitnevel vermijden.
- P280 Beschermende handschoenen / oogbescherming / gelaatsbescherming dragen.
- P305+P351+P338 BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.
- P333+P313 Bij huidirritatie of uitslag: een arts raadplegen.
- P337+P313 Bij aanhoudende oogirritatie: een arts raadplegen.
- 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: 868-77-9 EINECS: 212-782-2	2-hydroxyethylmethacrylaat ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	>50-≤100%
CAS: 109-59-1 EINECS: 203-685-6	2-isopropoxyethanol ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	>2,5-≤10%

- **Aanvullende gegevens:**

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

### RUBRIEK 4: Eerstehulpmaatregelen

- **4.1 Beschrijving van de eerstehulpmaatregelen**

- **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:**

De ogen gedurende verscheidene minuten onder stromend water afspoelen terwijl de oogspleet geopend blijft. Bij aanhoudende klachten een dokter raadplegen.

- **Na inslikken:** Als de klachten niet minderen, een arts raadplegen

- **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.

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(Vervolg op blz. 3)

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(Vervolg van blz. 2)

### 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 brandweelieden**
- **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** Niet nodig.
- **6.2 Milieuvorzorgsmaatregelen:** Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.
- **6.3 InsluTINGS- en reinigingsmethoden en -materiaal:**  
Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.  
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.

### 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 ontploffingsgevaar:** 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.

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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 ademhalingsstoestel 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 chemicaliënmengsel 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.

· **Oogbescherming:**



Nauw aansluitende veiligheidsbril

### RUBRIEK 9: Fysische en chemische eigenschappen

· **9.1 Informatie over fysische en chemische basiseigenschappen**

· **Algemene gegevens**

· **Voorkomen:**

<b>Vorm:</b>	Vloeibaar
<b>Kleur:</b>	Kleurloos
· <b>Geur:</b>	Karakteristiek
· <b>Geurdrempelwaarde:</b>	Niet bepaald.

· **pH-waarde:** Niet bepaald.

· **Toestandsverandering**

<b>Smelt-/vriespunt:</b>	Niet bepaald.
<b>Beginkookpunt en kooktraject:</b>	142 °C

· **Vlampunt:** 97 °C

· **Ontvlambaarheid (vast, gas):** Niet bruikbaar.

· **Ontstekingstemperatuur:** 345 °C

· **Ontledingstemperatuur:** Niet bepaald.

· **Zelfontbrandingstemperatuur:** Het produkt ontbrandt niet uit zichzelf.

· **Ontploffingseigenschappen:** Het produkt is niet ontploffingsgevaarlijk.

· **Ontploffingsgrenzen:**

<b>Onderste:</b>	1,6 Vol %
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<b>Bovenste:</b>	13 Vol %
· <b>Dampspanning bij 20 °C:</b>	3,5 hPa
· <b>Dichtheid bij 20 °C:</b>	1 g/cm <sup>3</sup>
· <b>Relatieve dichtheid</b>	Niet bepaald.
· <b>Dampdichtheid</b>	Niet bepaald.
· <b>Verdampingsnelheid</b>	Niet bepaald.
· <b>Oplosbaarheid in/mengbaarheid met Water:</b>	Niet resp. gering mengbaar.
· <b>Verdelingscoëfficiënt: n-octanol/water:</b>	Niet bepaald.
· <b>Viscositeit</b>	
<b>Dynamisch:</b>	Niet bepaald.
<b>Kinematisch:</b>	Niet bepaald.
· <b>Oplosmiddelgehalte:</b>	
<b>VOC (EG)</b>	0,00 %
<b>Gehalte aan vaste bestanddelen:</b>	0,0 %
· <b>9.2 Overige informatie</b>	Geen verdere relevante informatie verkrijgbaar.

### 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** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

#### · **Indelingsrelevantie LD/LC50-waarden:**

**868-77-9 2-hydroxyethylmethacrylaat**

Oraal	LD50	5.050 mg/kg (rat)
-------	------	-------------------

- **Primaire aandoening:**
- **Huidcorrosie/-irritatie**  
Veroorzaakt huidirritatie.
- **Ernstig oogletsel/oogirritatie**  
Veroorzaakt ernstige oogirritatie.
- **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.

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· **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.
- **Verdere ecologische informatie:**
- **Algemene informatie:**  
 Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen  
 Gevaar voor water klasse 1 (D) (Zelfclassificatie): gevaar voor water klein  
 Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **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 terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.

## RUBRIEK 14: Informatie met betrekking tot het vervoer

- |   |                     |
|---|---------------------|
| · <b>14.1 VN-nummer</b>   |                     |
| · <b>ADR, IMDG, IATA</b>  | Niet van toepassing |
| · <b>14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN</b>      |                     |
| · <b>ADR, IMDG, IATA</b>  | Niet van toepassing |
| · <b>14.3 Transportgevarenklasse(n)</b>   |                     |
| · <b>ADR, ADN, IMDG, IATA</b>   |                     |
| · <b>klasse</b>   | Niet van toepassing |
| · <b>14.4 Verpakkingsgroep:</b>   |                     |
| · <b>ADR, IMDG, IATA</b>  | Niet van toepassing |
| · <b>14.5 Milieugevaren:</b>  | Niet bruikbaar.     |
| · <b>14.6 Bijzondere voorzorgen voor de gebruiker</b>                             | Niet bruikbaar.     |
| · <b>14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code</b> | Niet bruikbaar.     |
| · <b>VN "Model Regulation":</b>   | Niet van toepassing |

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## 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.

#### · Lijst Zeer Zorgwekkende Stoffen (ZZS)

geen der bestanddelen staat op de lijst.

#### · Lijst van Potentieel Zeer Zorgwekkende Stoffen

868-77-9 | 2-hydroxyethylmethacrylaat

#### · Richtlijn 2012/18/EU

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

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

#### · Nationale voorschriften:

· **Gevaarklasse v. water:** Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen

· **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

H226 Ontvlambare vloeistof en damp.

H312 Schadelijk bij contact met de huid.

H315 Veroorzaakt huidirritatie.

H317 Kan een allergische huidreactie veroorzaken.

H319 Veroorzaakt ernstige oogirritatie.

H332 Schadelijk bij inademing.

#### · 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Ontvlambare vloeistoffen – Categorie 3

Acute Tox. 4: Acute toxiciteit - dermaal – Categorie 4

(Vervolg op blz. 8)

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*Skin Irrit. 2: Huidcorrosie/-irritatie – Categorie 2*  
*Eye Irrit. 2: Ernstig oogletsel/oogirritatie – Categorie 2*  
*Skin Sens. 1: Sensibilisatie van de huid – Categorie 1*

(Vervolg van blz. 7)

NL

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 10.04.2020

Tarkistus: 10.04.2020

### KOHTA 1: Aineen tai seoksen ja yhtiön tai yrityksen tunnistetiedot

- **1.1 Tuotetunniste**
- **Kauppanimike: TECHNOVIT 8100 - LIQUID**
- **Artikkelinumero: 14654**
- **1.2 Aineen tai seoksen merkitykselliset tunnistetut käytöt ja käytöt, joita ei suositella**  
Merkittäviä lisätietoja ei ole saatavilla.
- **Aineen / valmisteen käyttö** Laboratoriokemikaalit
- **1.3 Käyttöturvallisuustiedotteen toimittajan tiedot**
- **Valmistaja/toimittaja:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Tietoja antaa:** Product safety department
- **1.4 Häätöpuhelinnumero:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### KOHTA 2: Vaaran yksilöinti

- **2.1 Aineen tai seoksen luokitus**
- **Luokitus asetuksen (EY) N:o 1272/2008 mukaisesti**



GHS07

- Skin Irrit. 2 H315 Ärsyttää ihoa.
- Eye Irrit. 2 H319 Ärsyttää voimakkaasti silmiä.
- Skin Sens. 1 H317 Voi aiheuttaa allergisen ihoreaktion.

- **2.2 Merkinnät**
- **Merkinnät asetuksen (EY) N:o 1272/2008 mukaisesti** Tuote on luokiteltu ja merkitty CLP-asetuksen mukaan.
- **Varoitusmerkit**



GHS07

- **Huomiosana** Varoitus
- **Vaaran määräävät komponentit etiketeissä:**  
2-Hydroksietyylimetakrylaatti
- **Vaaralausekkeet**  
H315 Ärsyttää ihoa.  
H319 Ärsyttää voimakkaasti silmiä.  
H317 Voi aiheuttaa allergisen ihoreaktion.
- **Turvalausekkeet**  
P261 Vältä pölyn/savun/kaasun/sumun/höyryn/suihkeen hengittämistä.  
P280 Käytä suojakäsineitä / silmiensuojainta / kasvonsuojainta.  
P305+P351+P338 JOS KEMIKAALIA JOUTUU SILMIIN: Huuhdo huolellisesti vedellä usean minuutin ajan.  
Poista mahdolliset piilolinssit, jos sen voi tehdä helposti. Jatka huuhtomista.

(jatkuu sivulla 2)



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### Kauppanimike: TECHNOVIT 8100 - LIQUID

(jatkuu sivulla 1)

- P333+P313 Jos ilmenee ihoärsytystä tai ihottumaa: Hakeudu lääkäriin.  
 P337+P313 Jos silmä-ärsytys jatkuu: Hakeudu lääkäriin.  
 P501 Hävitä säiliö(t) noudattaen paikallisia/alueellisia/kansallisia/kansainvälisiä määräyksiä.
- **2.3 Muut vaarat**
  - **PBT- ja vPvB-arvioinnin tulokset**
  - **PBT:** Ei voida käyttää.
  - **vPvB:** Ei voida käyttää.

### KOHTA 3: Koostumus ja tiedot aineosista

- **3.2 Kemialliset ominaisuudet: Seokset**
- **Selostus:** Seuraavista aineista koostuva seos, jossa vaarattomia lisäaineita.

- **Sisältää vaarallisia aineita:**

CAS: 868-77-9 EINECS: 212-782-2	2-Hydroksietyylimetakrylaatti ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	>50-≤100%
CAS: 109-59-1 EINECS: 203-685-6	2-Isopropoksietanoli ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	>2,5-≤10%

- **Lisätietoja:** Annettujen turvaohjeiden sanamuoto kappaleesta 16.

### KOHTA 4: Ensiaputoimenpiteet

- **4.1 Ensiaputoimenpiteiden kuvaus**
- **Hengitettynä:**  
Huolehdyttävä riittävästä raittiin ilman saannista; käännyttävä varmuuden vuoksi lääkärin puoleen.  
Tajuton pidettävä ja kuljetettava kyljellään.
- **Ihokosketuksessa:** Pestävä heti vedellä ja saippualla ja huuhdottava hyvin.
- **Aineen päästyä silmiin:**  
Silmiiä huuhdotaan luomet auki juoksevan veden alla useita minutteja. Oireiden kestäessä käännyttään lääkärin puoleen.
- **Nieltyä:** Käännyttävä lääkärin puoleen oireiden jatkuessa.
- **4.2 Tärkeimmät oireet ja vaikutukset, sekä välittömät että viivästyneet** Merkittäviä lisätietoja ei ole saatavilla.
- **4.3 Mahdollisesti tarvittavaa välitöntä lääketieteellistä apua ja erityishoitoa koskevat ohjeet**  
Merkittäviä lisätietoja ei ole saatavilla.

### KOHTA 5: Palontorjuntatoimenpiteet

- **5.1 Sammutusaineet**
- **Sopivat sammutusaineet:**  
CO<sub>2</sub>, kuivakemikaalisammutin tai vesisuihku. Suuremmat palot torjutaan vesisuihukilla tai alkoholeja kestäväällä vaahdolla.
- **5.2 Aineesta tai seoksesta johtuvat erityiset vaarat** Merkittäviä lisätietoja ei ole saatavilla.
- **5.3 Palontorjuntaa koskevat ohjeet**
- **Erityinen suojavarustus:** Erikoistoimenpiteitä ei tarvita.

### KOHTA 6: Toimenpiteet onnettomuuspäästöissä

- **6.1 Varotoimenpiteet, henkilönsuojaimet ja menettely hätätilanteessa** Ei tarvita.
- **6.2 Ympäristöön kohdistuvat varotoimet:** Estettävä pääsy viemäreihin/pintavesiin/pohjaveteen.

(jatkuu sivulla 3)

# Käyttöturvallisuustiedote

## 1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 10.04.2020

Tarkistus: 10.04.2020

**Kauppanimike: TECHNOVIT 8100 - LIQUID**

(jatkuu sivulla 2)

- **6.3 Suojarakenteita ja puhdistusta koskevat menetelmät ja -välineet:**  
Imettävä nestettä sitovalla aineella (hiekkä, piimaa, hapon sidosaaine, yleisidosaine, sahajauho).  
Huolehdittava riittävästä tuuletuksesta.
- **6.4 Viihtaukset muihin kohtiin**  
Turvallista käsittelyä koskevia ohjeita kappaleessa 7.  
Henkilökohtaista suojavarustusta koskevia ohjeita kappaleessa 8.  
Aineen hävitystä koskevia ohjeita kappaleessa 13.

### KOHTA 7: Käsittely ja varastointi

- **7.1 Turvallisen käsittelyn edellyttämät toimenpiteet**  
Huolehdittava hyvästä tuuletuksesta/imusta työpaikalla.  
Vältettävä aerosolin muodostusta.
- **Palo- ja räjähdysuojaohteet:** Erikoistoimenpiteitä ei tarvita.
- **7.2 Turvallisen varastoinnin edellyttämät olosuhteet, mukaan luettuina yhteensopimattomuudet**
- **Varastointi:**
- **Varastotiloille ja säiliöille asetettavat vaatimukset:** Ei erikoisvaatimuksia.
- **Yhteisvarastointiohteet:** Ei tarvita.
- **Lisätietoja varastointiehtoihin:** Astiat on pidettävä tiiviisti suljettuina.
- **7.3 Erityinen loppukäyttö** Merkittäviä lisätietoja ei ole saatavilla.

### KOHTA 8: Altistumisen ehkäiseminen ja henkilösuojaimet

- **Lisäohjeita teknisten laitteiden varustukseen:** Ei muita tietoja, ks. kohta 7.
- **8.1 Valvontaa koskevat muuttajat**
- **Aineosat työpaikkakohtaisin valvottavien raja-arvoihin:**  
Tuote ei sisällä merkityksellisiä määriä aineita työpaikkakohtaisilla valvottavilla raja-arvoilla.
- **Lisäohjeet:** Tiedot perustuvat valmistushetkellä voimassaoleviin luetteloihin.
- **8.2 Altistumisen ehkäiseminen**
- **Henkilökohtainen suojavarustus:**
- **Yleiset suoja- ja hygienia-toimenpiteet:**  
Pidettävä loitolla elintarvikkeista, juomista ja rehuista.  
Likaantuneet, aineen saastuttamat vaatekappaleet on riisuttava välittömästi.  
Kädet on pestävä ennen taukoja ja työn päätyttyä.  
Vältettävä ihokosketusta ja kosketusta silmiin.
- **Hengityssuoja:**  
Lyhytaikaisessa tai vähäisessä altistuksessa hengityssuojasuodin; intensiivisessä tai pitkäaikaisessa rasiuksessa ulkoilmasta riippumaton hengityssuojain.
- **Käsisuojus:**



Suojakäsineet

- Käsin materiaalin tulee olla tuotetta/ainetta/valmistetta kestävä ja läpäisemätöntä.  
Puuttuvien testien vuoksi suositusta soveltuvasta suojakäsine materiaalista tuotteelle/ valmistelle / kemikaalikohteelle ei voida antaa.  
Suojakäsine materiaalin valinnassa on otettava huomioon läpäisyajat, läpäisevyyskerroin ja kuluminen.
- **Käsin materiaali**  
Soveltuvan käsine tyypin valikoima ei riipu yksinomaan materiaalista vaan myös muista laatuominaisuuksista ja vaihtelee eri valmistajilla. Koska tuote on valmiste, joka koostuu eri aineista, ei suojakäsine materiaalin kestävyys ole ennalta arvioitavissa vaan pitää tarkistaa ennen käyttöä.

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- **Käsinemateriaalin läpäisy aika**  
Tarkka läpäisy aika on selvitettävä suojakäsinevalmistajalta ja sitä on noudatettava.
- **Silmäsuojus:**



Tiiviit suojalasit

### KOHTA 9: Fysikaaliset ja kemialliset ominaisuudet

- **9.1 Fysikaalisia ja kemiallisia perusominaisuuksia koskevat tiedot**
- **Yleiset ohjeet**
- **Olomuoto:**
  - Muoto:** Nestemäinen
  - Väri:** Väritön
- **Haju:** Tyypillinen
- **Hajukynnys:** Ei määrätty.
- **pH-arvo:** Ei määrätty.
- **Tilanmuutos**
  - Sulamis- tai jäätymispiste:** Ei määrätty.
  - Kiehumispiste ja kiehumisalue:** 142 °C
- **Leimahduspiste:** 97 °C
- **Syttyvyys (kiinteät aineet, kaasut):** Ei voida käyttää.
- **Syttymislämpötila:** 345 °C
- **Hajoamislämpötila:** Ei määrätty.
- **Itsesyttymislämpötila:** Tuote ei ole itsestään syttyvä.
- **Räjähävyys:** Tuote ei ole räjähdysvaarallinen.
- **Räjähäysrajat:**
  - Alempi:** 1,6 Vol %
  - Ylempi:** 13 Vol %
- **Höyrypaine 20 °C lämpötilassa:** 3,5 hPa
- **Tiheys 20 °C lämpötilassa:** 1 g/cm<sup>3</sup>
- **Suhteellinen tiheys:** Ei määrätty.
- **Höyryntiheys:** Ei määrätty.
- **Haihtumisnopeus:** Ei määrätty.
- **Liukenevuus/sekoittuvuus veteen:** Ei sekoittuva tai vain osittain sekoittuva.
- **Jakautumiskerroin: n-oktanoliväsi:** Ei määrätty.
- **Viskositeetti:**
  - Dynaaminen:** Ei määrätty.
  - Kinemaattinen:** Ei määrätty.
- **Liuotainepitoisuus:**
  - VOC (EY)** 0,00 %
  - Kiinnepitoisuus:** 0,0 %

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**· 9.2 Muut tiedot**

Merkittäviä lisätietoja ei ole saatavilla.

**KOHTA 10: Stabiilisuus ja reaktiivisuus**

- **10.1 Reaktiivisuus** Merkittäviä lisätietoja ei ole saatavilla.
- **10.2 Kemiallinen stabiilisuus**
- **Terminen hajoavuus / vältettävät olosuhteet:** Ei hajaantumista määräystenmukaisessa käytössä.
- **10.3 Vaarallisten reaktioiden mahdollisuus** Ei tiedossa vaarallisia reaktioita.
- **10.4 Vältettävät olosuhteet** Merkittäviä lisätietoja ei ole saatavilla.
- **10.5 Yhteensopimattomat materiaalit:** Merkittäviä lisätietoja ei ole saatavilla.
- **10.6 Vaaralliset hajoamistuotteet:** Tiedossa ei ole vaarallisia hajoamistuotteita.

**KOHTA 11: Myrkyllisyyteen liittyvät tiedot**

- **11.1 Tiedot myrkyllisistä vaikutuksista**
- **Välitön myrkyllisyys** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.

**· Luokittelurelevantti LD/LC50-arvot:****868-77-9 2-Hydroksietyylimetakrylaatti**

Oraali LD50 5.050 mg/kg (rat)

- **Ensisijainen ärsyttävä vaikutus:**
- **Ihosyövyttävyyksihoärsytys**  
Ärsyttää ihoa.
- **Vakava silmävaurio/silmä-ärsytys**  
Ärsyttää voimakkaasti silmiä.
- **Hengitysteiden tai ihon herkistyminen**  
Voi aiheuttaa allergisen ihoreaktion.
- **CMR-vaikutukset eli syöpää aiheuttavat, perimää vaurioittavat ja lisääntymiselle vaaralliset vaikutukset**
- **Sukusolujen perimää vaurioittavat vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Syöpää aiheuttavat vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Lisääntymiselle vaaralliset vaikutukset** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Elinkohtainen myrkyllisyys – kerta-altistuminen**  
Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Elinkohtainen myrkyllisyys – toistuva altistuminen**  
Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- **Aspiraatiovaara** Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.

**KOHTA 12: Tiedot vaarallisuudesta ympäristölle**

- **12.1 Myrkyllisyys**
- **Vesimyrkyllisyys:** Merkittäviä lisätietoja ei ole saatavilla.
- **12.2 Pysyvyys ja hajoavuus** Merkittäviä lisätietoja ei ole saatavilla.
- **12.3 Biokertyvyys** Merkittäviä lisätietoja ei ole saatavilla.
- **12.4 Liikkuvuus maaperässä** Merkittäviä lisätietoja ei ole saatavilla.
- **Ekologisia lisätietoja:**
- **Yleisohjeita:**  
Vesistövaarallisuusluokka 1 (Oma luokitus): lievästi vesistöä vaarantava  
Estetään aineen pääsy ohentamattomana tai suurina määrinä pohjaveteen, vesistöihin, viemäristöön.
- **12.5 PBT- ja vPvB-arvioinnin tulokset**
- **PBT:** Ei voida käyttää.

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- **vPvB:** Ei voida käyttää.
- **12.6 Muut haitalliset vaikutukset** Merkittäviä lisätietoja ei ole saatavilla.

### KOHTA 13: Jätteiden käsittelyyn liittyvät näkökohdat

- **13.1 Jätteiden käsittelymenetelmät**
- **Suositus:** Ei voida hävittää yhdessä talousjätteiden kanssa. Ei saa päästää viemäristöön.
- **Puhdistamattomat pakkaukset:**
- **Suositus:** Hävitettävä virallisten määräysten mukaisesti.

### KOHTA 14: Kuljetustiedot

- |   |                   |
|---|-------------------|
| · <b>14.1 YK-numero</b><br>· <b>ADR, IMDG, IATA</b>   | tarpeeton         |
| · <b>14.2 Kuljetuksessa käytettävä virallinen nimi</b><br>· <b>ADR, IMDG, IATA</b>            | tarpeeton         |
| · <b>14.3 Kuljetuksen vaaraluokka</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>luokka</b>     | tarpeeton         |
| · <b>14.4 Pakkausryhmä</b><br>· <b>ADR, IMDG, IATA</b>  | tarpeeton         |
| · <b>14.5 Ympäristövaarat:</b>  | Ei voida käyttää. |
| · <b>14.6 Erityiset varotoimet käyttäjälle</b>  | Ei voida käyttää. |
| · <b>14.7 Kuljetus irtolastina Marpol-sopimuksen II liitteen ja IBC-säännösten mukaisesti</b> | Ei voida käyttää. |
| · <b>UN "Model Regulation":</b>   | tarpeeton         |

### KOHTA 15: Lainsäädäntöä koskevat tiedot

- **15.1 Nimenomaisesti ainetta tai seosta koskevat turvallisuus-, terveys- ja ympäristösäännökset tai -lainsäädäntö**
- **Direktiivi 2012/18/EU**
- **Nimetyt vaaralliset aineet - LIITE I** sisältäviä aineita ei ole lueteltu
- **NEUVOSTON ASETUS (EY) N:o 1907/2006 LIITE XVII** Rajoitusehdot: 3
- **15.2 Kemikaaliturvallisuusarviointi:** Kemikaaliturvallisuusarviointia ei ole tehty.

### KOHTA 16: Muut tiedot

Annetut tiedot perustuvat tähänhetkisiin tietoihimme. Ne eivät kuitenkaan anna takuuta tuotteen ominaisuuksista eivätkä aikaansaa sopimuksellista oikeussuhdetta.

- **Asiaankuuluvat lausekkeet**  
H226 Syttyvä neste ja höyry.  
H312 Haitallista joutuessaan iholle.  
H315 Ärsyttää ihoa.  
H317 Voi aiheuttaa allergisen ihoreaktion.  
H319 Ärsyttää voimakkaasti silmiä.

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*H332 Haitallista hengitettynä.***· Lyhenteet ja lyhennykset:***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)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 3: Syttyvät nesteet – Katgoria 3**Acute Tox. 4: Välitön myrkyllisyys - ihon kautta – Katgoria 4**Skin Irrit. 2: Ihosyövyttävyyys/ihoärsytys – Katgoria 2**Eye Irrit. 2: Vakava silmävaurio/silmä-ärsytys – Katgoria 2**Skin Sens. 1: Ihoa herkistävä – Katgoria 1*

# Fiche de données de sécurité

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

- **1.1 Identificateur de produit**
- **Nom du produit:** TECHNOVIT 8100 - LIQUID
- **Code du produit:** 14654
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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**



GHS07

- Skin Irrit. 2 H315 Provoque une irritation cutanée.
- Eye Irrit. 2 H319 Provoque une sévère irritation des yeux.
- 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**



GHS07

- **Mention d'avertissement** Attention
- **Composants dangereux déterminants pour l'étiquetage:**  
méthacrylate de 2-hydroxyéthyle
- **Mentions de danger**  
H315 Provoque une irritation cutanée.  
H319 Provoque une sévère irritation des yeux.  
H317 Peut provoquer une allergie cutanée.
- **Conseils de prudence**  
P261 Éviter de respirer les poussières/fumées/gaz/brouillards/vapeurs/aérosols.

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- P280 Porter des gants de protection / un équipement de protection des yeux / un équipement de protection du visage.
- 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.
- P333+P313 En cas d'irritation ou d'éruption cutanée: consulter un médecin.
- P337+P313 Si l'irritation oculaire persiste: consulter un médecin.
- P501 Éliminer le contenu/réceptacle 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: 868-77-9	méthacrylate de 2-hydroxyéthyle	>50-≤100%
EINECS: 212-782-2	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 109-59-1	2-isopropoxyéthanol	>2,5-≤10%
EINECS: 203-685-6	⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	

- **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**
- **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.
- **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. Si les troubles persistent, consulter un médecin.
- **Après ingestion:** Si les troubles persistent, consulter 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.

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- **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** Pas nécessaire.
- **6.2 Précautions pour la protection de l'environnement:**  
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).  
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.
- **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:**

<b>109-59-1 2-isopropoxyéthanol</b>
-------------------------------------

<b>VLEP</b>	Valeur à long terme: 105 mg/m <sup>3</sup> , 25 ppm
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- **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.  
Eviter tout contact avec les yeux et avec la peau.

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· **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

### RUBRIQUE 9: Propriétés physiques et chimiques

· **9.1 Informations sur les propriétés physiques et chimiques essentielles**

· **Indications générales**

· **Aspect:**

**Forme:** Liquide

**Couleur:** Incolore

· **Odeur:** Caractéristique

· **Seuil olfactif:** Non déterminé.

· **valeur du pH:** Non déterminé.

· **Changement d'état**

**Point de fusion/point de congélation:** Non déterminé.

**Point initial d'ébullition et intervalle d'ébullition:** 142 °C

· **Point d'éclair** 97 °C

· **Inflammabilité (solide, gaz):** Non applicable.

· **Température d'inflammation:** 345 °C

· **Température de décomposition:** Non déterminé.

· **Température d'auto-inflammabilité:** Le produit ne s'enflamme pas spontanément.

· **Propriétés explosives:** Le produit n'est pas explosif.

· **Limites d'explosion:**

**Inférieure:** 1,6 Vol %

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# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 10.04.2020

Révision: 10.04.2020

Nom du produit: **TECHNOVIT 8100 - LIQUID**

(suite de la page 4)

<b>Supérieure:</b>	13 Vol %
· <b>Pression de vapeur à 20 °C:</b>	3,5 hPa
· <b>Densité à 20 °C:</b>	1 g/cm <sup>3</sup>
· <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.
- **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** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

· **Valeurs LD/LC50 déterminantes pour la classification:**

**868-77-9 méthacrylate de 2-hydroxyéthyle**

Oral	LD50	5.050 mg/kg (rat)
------	------	-------------------

- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**  
Provoque une irritation cutanée.
- **Lésions oculaires graves/irritation oculaire**  
Provoque une sévère irritation des yeux.
- **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.

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# Fiche de données de sécurité

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Date d'impression : 10.04.2020

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**Nom du produit: TECHNOVIT 8100 - LIQUID**

(suite de la page 5)

- **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.
- **Autres indications écologiques:**
- **Indications générales:**  
Catégorie de pollution des eaux 1 (D) (Classification propre): peu polluant  
Ne pas laisser le produit, non dilué ou en grande quantité, pénétrer la nappe phréatique, les eaux ou les canalisations.
- **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.

### 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

- |  |                 |
|--|-----------------|
| · <b>14.1 Numéro ONU</b>   |                 |
| · <b>ADR, IMDG, IATA</b>   | néant           |
| · <b>14.2 Désignation officielle de transport de l'ONU</b>   |                 |
| · <b>ADR, IMDG, IATA</b>   | néant           |
| · <b>14.3 Classe(s) de danger pour le transport</b>  |                 |
| · <b>ADR, ADN, IMDG, IATA</b>  |                 |
| · <b>Classe</b>  | néant           |
| · <b>14.4 Groupe d'emballage</b>   |                 |
| · <b>ADR, IMDG, IATA</b>   | néant           |
| · <b>14.5 Dangers pour l'environnement:</b>  | Non applicable. |
| · <b>14.6 Précautions particulières à prendre par l'utilisateur</b>                                  | Non applicable. |
| · <b>14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC</b> | Non applicable. |

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# Fiche de données de sécurité

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**Nom du produit: TECHNOVIT 8100 - LIQUID**

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· "Règlement type" de l'ONU: néant

### 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.
- **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**

- H226 Liquide et vapeurs inflammables.
- H312 Nocif par contact cutané.
- H315 Provoque une irritation cutanée.
- H317 Peut provoquer une allergie cutanée.
- H319 Provoque une sévère irritation des yeux.
- H332 Nocif par inhalation.

· **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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 3: Liquides inflammables – Catégorie 3
- Acute Tox. 4: Toxicité aiguë - voie cutanée – Catégorie 4
- Skin Irrit. 2: Corrosion cutanée/irritation cutanée – Catégorie 2
- Eye Irrit. 2: Lésions oculaires graves/irritation oculaire – Catégorie 2
- Skin Sens. 1: Sensibilisation cutanée – Catégorie 1

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.04.2020

überarbeitet am: 10.04.2020

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

- **1.1 Produktidentifikator**
- **Handelsname: TECHNOVIT 8100 - LIQUID**
- **Artikelnummer: 14654**
- **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**  
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffes / 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: info@emsdiasum.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  
Osterreich: +43 1406 43 43, Gesundheit Osterreich 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**



Skin Irrit. 2 H315 Verursacht Hautreizungen.  
Eye Irrit. 2 H319 Verursacht schwere Augenreizung.  
Skin Sens. 1 H317 Kann allergische Hautreaktionen verursachen.

- **2.2 Kennzeichnungselemente**
- **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008**  
Das Produkt ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.
- **Gefahrenpiktogramme**



(Fortsetzung auf Seite 2)

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**Handelsname: TECHNOVIT 8100 - LIQUID**

(Fortsetzung von Seite 1)

- **Signalwort** Achtung
- **Gefahrbestimmende Komponenten zur Etikettierung:**  
2-Hydroxyethylmethacrylat
- **Gefahrenhinweise**  
H315 Verursacht Hautreizungen.  
H319 Verursacht schwere Augenreizung.  
H317 Kann allergische Hautreaktionen verursachen.
- **Sicherheitshinweise**  
P261 Einatmen von Staub/Rauch/Gas/Nebel/Dampf/Aerosol vermeiden.  
P280 Schutzhandschuhe / Augenschutz / Gesichtsschutz tragen.  
P305+P351+P338 **BEI KONTAKT MIT DEN AUGEN:** Einige Minuten lang behutsam mit Wasser spülen. Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.  
P333+P313 Bei Hautreizung oder -ausschlag: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.  
P337+P313 Bei anhaltender Augenreizung: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.  
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: 868-77-9	2-Hydroxyethylmethacrylat	>50-≤100%
EINECS: 212-782-2	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 109-59-1	2-Isopropoxy-ethanol	>2,5-≤10%
EINECS: 203-685-6	⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	

- **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**
- **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 mehrere Minuten bei geöffnetem Lidspalt unter fließendem Wasser spülen. Bei anhaltenden Beschwerden Arzt konsultieren.
- **Nach Verschlucken:** Bei anhaltenden Beschwerden Arzt konsultieren.
- **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.

DE

(Fortsetzung auf Seite 3)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

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Handelsname: **TECHNOVIT 8100 - LIQUID**

(Fortsetzung von Seite 2)

### 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**  
Nicht erforderlich.
- **6.2 Umweltschutzmaßnahmen:** 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.  
Für ausreichende Lüftung sorgen.
- **6.4 Verweis auf andere Abschnitte**  
Informationen zur sicheren Handhabung siehe Abschnitt 7.  
Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.  
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**

· <b>Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:</b>
868-77-9 2-Hydroxyethylmethacrylat
MAK   vgl.Abschn.IIb

(Fortsetzung auf Seite 4)



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**Handelsname: TECHNOVIT 8100 - LIQUID**

(Fortsetzung von Seite 3)

**109-59-1 2-Isopropoxy-ethanol**

 AGW Langzeitwert: 44 mg/m<sup>3</sup>, 10 ml/m<sup>3</sup>  
 2(1);DFG, H, Y

 · **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.

Beschmutzte, getränkte Kleidung sofort ausziehen.

Vor den Pausen und bei Arbeitsende Hände waschen.

Berührung mit den Augen und der Haut vermeiden.

 · **Atemschutz:**

Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition unluftunabhängiges 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.

 · **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: Flüssig

Farbe: Farblos

 · **Geruch:** Charakteristisch

 · **Geruchsschwelle:** Nicht bestimmt.

 · **pH-Wert:** Nicht bestimmt.

 · **Zustandsänderung**

Schmelzpunkt/Gefrierpunkt: Nicht bestimmt.

(Fortsetzung auf Seite 5)

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(Fortsetzung von Seite 4)

<b>Siedebeginn und Siedebereich:</b>	142 °C
· <b>Flammpunkt:</b>	97 °C
· <b>Entzündbarkeit (fest, gasförmig):</b>	Nicht anwendbar.
· <b>Zündtemperatur:</b>	345 °C
· <b>Zersetzungstemperatur:</b>	Nicht bestimmt.
· <b>Selbstentzündungstemperatur:</b>	Das Produkt ist nicht selbstentzündlich.
· <b>Explosive Eigenschaften:</b>	Das Produkt ist nicht explosionsgefährlich.
· <b>Explosionsgrenzen:</b>	
<b>Untere:</b>	1,6 Vol %
<b>Obere:</b>	13 Vol %
· <b>Dampfdruck bei 20 °C:</b>	3,5 hPa
· <b>Dichte bei 20 °C:</b>	1 g/cm <sup>3</sup>
· <b>Relative Dichte</b>	Nicht bestimmt.
· <b>Dampfdichte</b>	Nicht bestimmt.
· <b>Verdampfungsgeschwindigkeit</b>	Nicht bestimmt.
· <b>Löslichkeit in / Mischbarkeit mit Wasser:</b>	Nicht bzw. wenig mischbar.
· <b>Verteilungskoeffizient: n-Octanol/Wasser:</b>	Nicht bestimmt.
· <b>Viskosität:</b>	
<b>Dynamisch:</b>	Nicht bestimmt.
<b>Kinematisch:</b>	Nicht bestimmt.
· <b>Lösemittelgehalt:</b>	
<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** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

(Fortsetzung auf Seite 6)

# Sicherheitsdatenblatt

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**Handelsname: TECHNOVIT 8100 - LIQUID**

(Fortsetzung von Seite 5)

**· Einstufungsrelevante LD/LC50-Werte:**
**868-77-9 2-Hydroxyethylmethacrylat**

Oral	LD50	5.050 mg/kg (rat)
------	------	-------------------

**· Primäre Reizwirkung:**
**· Ätz-/Reizwirkung auf die Haut**

Verursacht Hautreizungen.

**· Schwere Augenschädigung/-reizung**

Verursacht schwere Augenreizung.

**· 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.

**· Weitere ökologische Hinweise:**
**· Allgemeine Hinweise:**

Wassergefährdungsklasse 1 (Selbsteinstufung): schwach wassergefährdend

Nicht unverdünnt bzw. in größeren Mengen in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.

**· 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

**· 14.1 UN-Nummer**
**· ADR, IMDG, IATA**

entfällt

(Fortsetzung auf Seite 7)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 10.04.2020

überarbeitet am: 10.04.2020

**Handelsname: TECHNOVIT 8100 - LIQUID**

(Fortsetzung von Seite 6)

- |  |                  |
|--|------------------|
| <ul style="list-style-type: none"> <li>· <b>14.2 Ordnungsgemäße UN-Versandbezeichnung</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                   | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transportgefahrenklassen</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> <li>· <b>Klasse</b></li> </ul> | entfällt         |
| <ul style="list-style-type: none"> <li>· <b>14.4 Verpackungsgruppe</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                      | entfällt         |
| <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> </ul>   | Nicht anwendbar. |
| <ul style="list-style-type: none"> <li>· <b>14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code</b></li> </ul>        | Nicht anwendbar. |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>  | entfällt         |

### 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.**
- **VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII Beschränkungsbedingungen: 3**
- **Nationale Vorschriften:**
- **Wassergefährdungsklasse: WGK 1 (Selbsteinstufung): schwach wassergefährdend.**
- **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**
- H226 Flüssigkeit und Dampf entzündbar.
- H312 Gesundheitsschädlich bei Hautkontakt.
- H315 Verursacht Hautreizungen.
- H317 Kann allergische Hautreaktionen verursachen.
- H319 Verursacht schwere Augenreizung.
- H332 Gesundheitsschädlich bei Einatmen.
- **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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent

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*PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 3: Entzündbare Flüssigkeiten – Kategorie 3**Acute Tox. 4: Akute Toxizität - dermal – Kategorie 4**Skin Irrit. 2: Hautreizende/-ätzende Wirkung – Kategorie 2**Eye Irrit. 2: Schwere Augenschädigung/Augenreizung – Kategorie 2**Skin Sens. 1: Sensibilisierung der Haut – 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:** TECHNOVIT 8100 - LIQUID
- **Articolo numero:** 14654
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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](http://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**



GHS07

- Skin Irrit. 2 H315 Provoca irritazione cutanea.
- Eye Irrit. 2 H319 Provoca grave irritazione oculare.
- 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.
- **Pittogrammi di pericolo**



GHS07

- **Avvertenza** Attenzione
- **Componenti pericolosi che ne determinano l'etichettatura:**  
2-idrossietile metacrilato
- **Indicazioni di pericolo**  
H315 Provoca irritazione cutanea.

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*H319 Provoca grave irritazione oculare.**H317 Può provocare una reazione allergica cutanea.***Consigli di prudenza***P261 Evitare di respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol.**P280 Indossare guanti / occhiali di protezione / protezione per il viso.**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.**P333+P313 In caso di irritazione o eruzione della pelle: consultare un medico.**P337+P313 Se l'irritazione degli occhi persiste, consultare un medico.**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: 868-77-9	2-idrossietile metacrilato	>50-≤100%
EINECS: 212-782-2	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 109-59-1	2-isopropossietanolo	>2,5-≤10%
EINECS: 203-685-6	⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	

**Ulteriori indicazioni:** Il testo dell'avvertenza dei pericoli citati può essere appreso dal capitolo 16**SEZIONE 4: Misure di primo soccorso****4.1 Descrizione delle misure di primo soccorso****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. Se persiste il dolore consultare il medico.***Ingestione:** Se il dolore persiste consultare il 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.

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- **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** Non necessario.
- **6.2 Precauzioni ambientali:** 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).  
Provvedere ad una sufficiente areazione.
- **6.4 Riferimento ad altre sezioni**  
Per informazioni relative ad un 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.

### **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:**

#### **109-59-1 2-isopropossietanolo**

TWA	Valore a lungo termine: 106 mg/m <sup>3</sup> , 25 ppm
Cute	

- **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 e la pelle.

##### **Maschera protettiva:**

- Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.

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**· 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.*

**· 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:** Caratteristico**· 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:** 142 °C**· Punto di infiammabilità:** 97 °C**· Infiammabilità (solidi, gas):** Non applicabile.**· Temperatura di accensione:** 345 °C**· Temperatura di decomposizione:** Non definito.**· Temperatura di autoaccensione:** Prodotto non autoinfiammabile.**· Proprietà esplosive:** Prodotto non esplosivo.**· Limiti di infiammabilità:****Inferiore:** 1,6 Vol %**Superiore:** 13 Vol %**· Tensione di vapore a 20 °C:** 3,5 hPa

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· <b>Densità a 20 °C:</b>	1 g/cm <sup>3</sup>
· <b>Densità relativa</b>	Non definito.
· <b>Densità di vapore:</b>	Non definito.
· <b>Velocità di evaporazione</b>	Non definito.
· <b>Solubilità in/Miscibilità con acqua:</b>	Poco e/o non miscibile.
· <b>Coefficiente di ripartizione: n-ottanolo/acqua:</b>	Non definito.
· <b>Viscosità:</b>	
<b>Dinamica:</b>	Non definito.
<b>Cinematica:</b>	Non definito.
· <b>Tenore del solvente:</b>	
<b>VOC (CE)</b>	0,00 %
<b>Contenuto solido:</b>	0,0 %
· <b>9.2 Altre informazioni</b>	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** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

· **Valori LD/LC50 rilevanti per la classificazione:**

**868-77-9 2-idrossietile metacrilato**

Orale	LD50	5.050 mg/kg (rat)
-------	------	-------------------

- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea**  
Provoca irritazione cutanea.
- **Lesioni oculari gravi/irritazioni oculari gravi**  
Provoca grave irritazione oculare.
- **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.

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- **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.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**  
Pericolosità per le acque classe 1 (D) (Autoclassificazione): poco pericoloso  
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.
- **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><br>· <b>ADR, IMDG, IATA</b>   | <i>non applicabile</i>  |
| · <b>14.2 Nome di spedizione dell'ONU</b><br>· <b>ADR, IMDG, IATA</b>                                      | <i>non applicabile</i>  |
| · <b>14.3 Classi di pericolo connesso al trasporto</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Classe</b> | <i>non applicabile</i>  |
| · <b>14.4 Gruppo di imballaggio</b><br>· <b>ADR, IMDG, IATA</b>  | <i>non applicabile</i>  |
| · <b>14.5 Pericoli per l'ambiente:</b>   | <i>Non applicabile.</i> |
| · <b>14.6 Precauzioni speciali per gli utilizzatori</b>  | <i>Non applicabile.</i> |
| · <b>14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL ed il codice IBC</b>                        | <i>Non applicabile.</i> |
| · <b>UN "Model Regulation":</b>  | <i>non applicabile</i>  |

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### **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.
- **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.*

- **Fraasi rilevanti**

H226 Liquido e vapori infiammabili.  
 H312 Nocivo per contatto con la pelle.  
 H315 Provoca irritazione cutanea.  
 H317 Può provocare una reazione allergica cutanea.  
 H319 Provoca grave irritazione oculare.  
 H332 Nocivo se inalato.

- **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  
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 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 VOC: Volatile Organic Compounds (USA, EU)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 Flam. Liq. 3: Liquidi infiammabili – Categoria 3  
 Acute Tox. 4: Tossicità acuta per via cutanea – Categoria 4  
 Skin Irrit. 2: Corrosione/irritazione della pelle – Categoria 2  
 Eye Irrit. 2: Gravi lesioni oculari/irritazione oculare – Categoria 2  
 Skin Sens. 1: Sensibilizzazione della pelle – Categoria 1

# 安全データシート

## JIS Z 7253:2012 による

印刷日: 2020.04.10

改訂日: 2020.04.10

### 1 化学品及び会社情報

- ・製品識別子
- ・商品名: **TECHNOVIT 8100 - LIQUID**
- ・製品番号: 14654
- ・該当純物質または混合物の関連特定用途及び使用禁止用途 追加的な関連情報は得られていません。
- ・成分の種類/調合/調製用化学物質
- ・安全データシートの供給元の詳細情報
- ・製造者/納入者:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- ・その他の情報問い合わせ先: Product safety department
- ・緊急通報用電話番号:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 危険有害性の要約

- ・純物質または混合物の分類



皮膚腐食性/刺激性 区分2 H315 皮膚刺激  
 重篤な眼の損傷性/眼刺激性 区分2A H319 強い眼刺激  
 感作性(皮膚) 区分1 H317 アレルギー性皮膚反応を起こすおそれ

- ・ラベル要素

- ・GHS ラベル要素

本製品はGHS(化学品の分類および表示に関する世界調和システム)により分類及び表示されています。

- ・危険図表



GHS07

- ・表示語 警告

- ・危険と定められた成分をラベル表示:

メタクリル酸 2 - ヒドロキシエチル

- ・危険文句

皮膚刺激  
 強い眼刺激  
 アレルギー性皮膚反応を起こすおそれ

- ・注意文句

粉じん/煙/ガス/ミスト/蒸気/スプレーの吸入を避けること。  
 保護手袋/目保護帯/顔保護面 の着用  
 眼に入った場合: 水で数分間注意深く洗うこと。次にコンタクトレンズを着用していて容易に外せる場合は外すこと。その後も洗浄を続けること。  
 皮膚刺激又は発しん(疹)が生じた場合: 医師の診断/手当てを受けること。

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商品名: TECHNOVIT 8100 - LIQUID

(1ページの続き)

眼の刺激が続く場合: 医師の診断/手当てを受けること。

現地/地域/国/国際規定に従い内容物・容器の露出

### その他の危険性

・PBT (残留性、生物濃縮性、毒性物質) 及び vPvB (高残留性、高生物濃縮性物質) アセスメント

・PBT (残留性、生物濃縮性、毒性物質): 情報なし

・vPvB (高残留性、高生物濃縮性物質): 情報なし

## 3 組成及び成分情報

### 化学的特性: 混合物

説明説明説明換のない混ぜ合わせかたをした以下成分からなる混合物

### 危険な含有成分:

868-77-9	メタクリル酸 2 - ヒドロキシエチル	>50-≤100%
	⚠ 皮膚腐食性/刺激性 区分2, H315; 重篤な眼の損傷性/眼刺激性 区分2, H319; 感作性(皮膚) 区分1, H317	
109-59-1	2-isopropoxyethanol	>2.5-≤10%
	⚠ 引火性液体 区分3, H226; ⚠ 急性毒性(経皮) 区分4, H312; 急性毒性(吸入) 区分4, H332; 重篤な眼の損傷性/眼刺激性 区分2, H319	

## 4 応急措置

### 応急手当処置に関する説明

#### 吸い込んだ場合:

外気を十分に送り込み、安全のため医師を呼ぶ

意識不明の場合には安定させた状態で横向きに寝かせ、移送する

#### 皮膚が触れた場合: 即刻石鹸と水で洗い、よくすすぐ

#### 眼に入った場合:

瞼を開けたまま、流水で何分間か眼をすすぎ、状態がよくなる場合には医者に相談する

#### 飲み込んだ場合: 状態が好転しない場合には医師に相談する

#### 医師への指示事項:

・最も重要な急性及び慢性の症状及び影響 追加的な関連情報は得られていません。

・何らかの即時医療処置及び特別治療の必要性を示す兆候 追加的な関連情報は得られていません。

## 5 火災時の措置

### 消火剤

#### 適切な消火剤:

CO<sub>2</sub>, 消火粉末剤あるいは水放射。火が大きい場合には水放射もしくは耐アルコール性泡を使用

#### 本化学物質または混合物から発生する特別な危険性 追加的な関連情報は得られていません。

#### 消防士向けアドバイス

・特別な保護装備: 特別な措置は必要としない

## 6 漏出時の措置

### 個人的予防措置、保護具及び応急処置法 必要ない

・環境関連予防措置: 下水処理施設、地上水あるいは地下水に達しないようにする

### 封じ込め及び浄化のための方法及び材料:

液体吸収材(砂、珪藻土、酸結合剤、ユニバーサル結合剤、おがくず)で吸収する

十分な換気を心がける

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- ・他のセクションへの言及  
安全な取り扱い方に関しては7項を参照  
人の保護装備の情報に関しては8項を参照  
廃棄処分に関しては13項参照

### 7 取り扱い及び保管上の注意

- ・**取り扱い方:**
- ・**安全操作のための予防措置**  
作業場では十分な換気、埃を吸い取るよう心がける  
エアゾールの発生を防ぐ
- ・**火災および爆発防止に関する注意事項:** 特別な措置は必要ない
- ・**混融危険性を含めた安全貯蔵条件**
- 保管保管保管
- ・**保管スペースおよび容器に関する要求事項:** 特別な要求事項なし
- ・**同じ場所に保管する際の注意事項:** 必要ない
- ・**保管条件に関するその他の注意事項:** 容器は密閉した状態に保つ
- ・**特定の最終用途** 追加的な関連情報は得られていません。

### 8 ばく露防止及び保護措置

- ・**技術設備の形体に関する追加注意事項:** その他の申し立てなし、7項参照
- ・**管理パラメーター**
- ・**作業場において限界値の監視を要する成分:**  
このプロダクトは作業場において監視する必要がある限界値を持つ成分は含まれていない
- ・**追加注意事項:** 生成時に有効なリストがもとなっている
- ・**暴露管理**
- ・**人的保護装備:**
- ・**一般防止措置および衛生措置:**  
食物、飲み物、飼料からは遠ざける  
汚れのしみ込んだ衣類は即刻脱ぐ  
休憩の前、作業終了後には手を洗う  
眼に入らないよう、また皮膚に接触しないよう注意する
- ・**呼吸保護器具:**  
短時間もしくは負担が小さい場合には呼吸フィルター付装置を、集中的にあるいは長時間触れる場合には、酸素ポンベ付き呼吸保護装備を使用すること
- ・**手の保護:**



保護手袋

手袋の材質は物質/材料/調合剤に対して耐性であり、成分を通すことがあってはならない  
テストをおこなっていないため、物質/調合剤/化合物を取り扱う際の手袋の材質として勧められるもの  
はない  
浸透時間、透過性および劣化の点を留意しながら手袋の材質を選択する

#### 手袋材

適当な手袋は材質だけではなく、その他の品質によっても変わり、各メーカーによって異なる。調合する際の物質は複数の成分から生成されるため、手袋材の耐久性は予想できない。このため使用前には必ずチェックしなければならぬ

- ・**手袋材の浸透時間** 正確な浸透時間については保護手袋メーカーに問い合わせ、それを遵守すること

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## ・ 眼の保護:



密閉式保護めがね

### 9 物理的及び化学的性質

<ul style="list-style-type: none"> <li>基本的な物理及び化学特性に関する情報</li> <li>一般指示事項</li> </ul>	
外観外観外観	
形:	液状
色:	無色
におい:	特徴的
嗅覚閾値	決まっていない。
pH-値:	決まっていない。
状態の変化	
融点融点融解範囲:	決まっていない
沸点沸点沸蒸範囲:	142 °C
引火点:	97 °C
発火性 (個体、気体):	情報なし
発火温度燃焼温度	345 °C
分解温度燃焼温度	決まっていない。
自然自然発燃性:	プロダクトは自然発火しない
爆発の危険:	プロダクトは爆発する危険はない
爆発限界:	
下限:	1.6 Vol %
上限:	13 Vol %
蒸気圧 約 20 °C:	3.5 hPa
密度密度密度0 °C:	1 g/cm <sup>3</sup>
相対相対飽和度密度	決まっていない。
蒸気密度	決まっていない。
腐蝕速度速度	決まっていない。
以下以下成分における消和性/との混和性	
水:	混ぜ合わせられない、ほとんど混ぜ合わせられない
分配係数 (n-オクタノール/水)	決まっていない。
粘性:	
学的学的	決まっていない。
運動運動種動	決まっていない。
溶剤含有量:	
固形物含有量:	0.0 %

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### ・他の情報

追加的な関連情報は得られていません。

## 10 安定性及び反応性

応反応性追加的な関連情報は得られていません。

- ・化学的安定性
- ・熱分解/燃焼/爆発条件/安定どおりの使用では分解しない
- 危険/危険/燃焼/爆発/危険な反応は起きていない
- け避けべき条件/追加的な関連情報は得られていません。
- ・不適合物質: 追加的な関連情報は得られていません。
- ・危険な分解生成物: 危険な分解プロダクトはない

## 11 有害性情報

・毒性学的影響に関する情報

・急性毒性:

分類/分類/分類 LD/LC50 値:

868-77-9 メタクリル酸E - ロキロ主成分チルチ

□ LD50 5,050 mg/kg (rat)

・初期刺激作用作用

・皮膚において: 皮膚と粘膜を刺激

・眼において: 刺激作用

・感作作用: 皮膚接触によって感作作用の可能性あり

・毒性に関する補足補足補足事項:

調査に関するEUの最新の一般分類ガイドラインの計算によれば、プロダクトでは以下の危険が見込まれる

刺激的

## 12 環境影響情報

毒性/毒性/毒性

・水生生物に対する毒性: 追加的な関連情報は得られていません。

持続/持続/持続/分解性 追加的な関連情報は得られていません。

・環境システムにおける作用:

生体/生体内蓄積性 追加的な関連情報は得られていません。

・土壌内移動性 追加的な関連情報は得られていません。

・その他のエコロジーに関する注意事項:

・一般注意事項:

水への危険度分類1(ドイツの規定)(自己査定): 水に対する危険性はわずかにある

薄めずに、あるいは大量に地下水、河川もしくは下水施設に流してはならない

・PBT(残留性、生物濃縮性、毒性物質)及びvPvB(高残留性、高生物濃縮性物質)アセスメント

・PBT(残留性、生物濃縮性、毒性物質): 情報なし

・vPvB(高残留性、高生物濃縮性物質): 情報なし

他の他/他/他/他/追加的な関連情報は得られていません。

JP

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# 安全データシート

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### 13 廃棄上の注意

#### 廃棄廃棄物処理方法

勧告勧告家庭ごみとはいっしょに処分できない。下水処理施設に流してはならない

#### ・洗浄されていないガッケット:

勧告勧告関係当局の規則に従って処分する

### 14 輸送上の注意

・番号番号番号 ・ADR, IMDG, IATA	無効
・国連出荷正式名 ・ADR, IMDG, IATA	無効
輸送輸送輸送危険性クラス ・ADR, ADN, IMDG, IATA	無効
分類分類分類 ・ADR, IMDG, IATA	無効
・環境危険:	情報なし
・ユーザー用特別予防措置	情報なし
・マルポール条約 (MARPOL73/78) 付属書I及び及び IBCコードに準じたバ輸送輸送輸送	情報なし
・UN "糞糞規制規制	無効

### 15 適用法令

- ・該当純物質または混合物に対する安全、衛生及び環境規制・法律
- ・化審法

#### 既存既存既知物質

868-77-9	メタクリル酸 2 - ヒドロキシエチル	2-1044
109-59-1	2-isopropoxyethanol	2-410, 7-97

#### ・特定化学物質

内容成分はリストアップされていない

#### ・監視化学物質、旧第二種監視化学物質、旧第三種監視化学物質

全ての内容成分はリストアップされている

#### ・優先評価既知物質

109-59-1	2-isopropoxyethanol
----------	---------------------

#### 物質物質物質

内容成分はリストアップされていない

#### 既存既存既知物質安全性点検結果 (分解性・蓄積性) 性)

全ての内容成分はリストアップされている

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### 機密機溶剤中毒予防規則第(施錠表別表第2)

#### ・第一種機溶剤類

内容成分はリストアップされていない

#### ・第二種機溶剤類

内容成分はリストアップされていない

#### ・第三種機溶剤類

内容成分はリストアップされていない

#### い 強臭・発煙・発熱・原認された化学物質

内容成分はリストアップされていない

#### ・消防法

全ての内容成分はリストアップされている

#### ・海洋汚染防止法

内容成分はリストアップされていない

#### ・特定物質等の規制等によるオゾン層の保護に関する法律

#### ・特定物質物質物質物質

内容成分はリストアップされていない

#### ・特定物質

内容成分はリストアップされていない

#### ・大気汚染防止法

内容成分はリストアップされていない

#### ・水質汚濁防止法

#### ・有害物質物質

内容成分はリストアップされていない

#### ・指定物質

内容成分はリストアップされていない

#### ・GHS ラベル要素

本製品はGHS(化学品の分類および表示に関する世界調和システム)により分類及び表示されています。

#### ・危険図表



GHS07

#### ・表示語 警告

#### ・危険と定められた成分をラベル表示:

メタクリル酸 2 - ヒドロキシエチル

#### ・危険文句

皮膚刺激

強い眼刺激

アレルギー性皮膚反応を起こすおそれ

#### ・注意文句

粉じん/煙/ガス/ミスト/蒸気/スプレーの吸入を避けること。

保護手袋/目保護帯/顔保護面の着用

眼に入った場合: 水で数分間注意深く洗うこと。次にコンタクトレンズを着用していて容易に外せる場合は外すこと。その後も洗浄を続けること。

皮膚刺激又は発しん(疹)が生じた場合: 医師の診断/手当てを受けること。

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# 安全データシート

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眼の刺激が続く場合：医師の診断/手当てを受けること。  
現地/地域/国/国際規定に従い内容物・容器の露出  
・化学物質の安否値評価評価学物質安全性評価が遂行されていない

### 16 その他の情報

この情報は現在の我々の認識に基づいている。ただし、プロダクトの特性を保証するものではなく、また契約において法的根拠にはならない

#### 縮約と二文字語:

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

PRTR/化管法: 化学物質排出把握管理促進法

引火性液体 区分3: Flammable liquids – Category 3

急性毒性(経皮) 区分4: Acute toxicity – Category 4

皮膚腐食性/刺激性 区分2: Skin corrosion/irritation – Category 2

重篤な眼の損傷性/眼刺激性 区分2: Serious eye damage/eye irritation – Category 2

重篤な眼の損傷性/眼刺激性 区分2A: Serious eye damage/eye irritation – Category 2A

感作性(皮膚) 区分1: Skin sensitisation – Category 1









# 물질안전보건자료 GHS에 따라라따

인쇄일자: 2020.04.10

개정: 2020.04.10

**제품명: TECHNOVIT 8100 - LIQUID**

(3 쪽부터계속)

- **추천정보정보**조 할 당시에 유 효 한 목 록 을 기초로 사용했다.

노출 통제를 통제  
개인개인 보호구

· **일반적보호조치및위생조치:**

- 식료품, 음료수와 사료로부터 멀리떨어뜨려 놓는다.
- 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.
- 휴식 전이나 작업이 끝날때마다 손을 씻는다.
- 눈과 피부와의 접촉은 피한다.

· **호흡기 보호보호**

- 단 시간 또는 경미한 오염의 경우에는 호흡 여과기를 사용한다. 심각한 또는 장기간 노출시에는 호흡보호장비를 사용한다.

· **보수 보호보호**



보호용 장갑

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

· **장갑 의재료**

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

- **장갑 재료 의 투과 시간** 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.

· **보수 보호보호**



팍조이는보안경

## 9 물리화학적 특성

기본 물리화학적 특성에 대한 정보

- 일반정보
- 외형외형외형

· **물리적 상태상태** 액체의  
· **색:** 색소가 없는  
· **냄새**냄새냄새 특색있는  
· **후각역치** 알맞지않다.

· **pH:** 알맞지않다.

· **상태변화**  
· **녹는점/어는점:** 맞지않는  
· **초기초기 끓는점과 끓는점범위범위** 142 °C

· **인화점:** 97 °C

· **인화성 고체기체기체** 해당사항 없음.

· **점화온도:** 345 °C

· **분해온도** 알맞지않다.

(5 쪽에계속)



# 물질안전보건자료 GHS에 따라

인쇄일자: 2020.04.10

개정: 2020.04.10

**제품명: TECHNOVIT 8100 - LIQUID**

자극적인

(5 쪽부터 계속)

## 12 환경에 미치는 영향

### 독성특성독성

- **수생독성:** 추가적인 정보가 존재하지 않습니다.
- **지속성 및 분해성** 추가적인 정보가 존재하지 않습니다.
- **환경 시스템에서의 행동:**
- **생물농축 잠재성** 추가적인 정보가 존재하지 않습니다.
- **토양내 이동성** 추가적인 정보가 존재하지 않습니다.
- **추가적인 생태학 정보**

### 일반 열안정성특징

- 수질오염등급 1 (자체등급분류): 약하게수질오염이된
- 희석시키지않은채대량으로지하수나, 하천으로그리고하수도망에도달하지않게한다.
- PBT(잔류성, 생물농축성, 물질물질물질) vPvB(고 잔류성, 고 생물농축성, 물질물질물질) 결과
- PBT(잔류성, 생물농축성, 물질물질물질) 당사항 없음.
- vPvB(고 잔류성, 고 생물농축성, 물질물질물질) 당사항 없음.
- 기타기타 **부작용** 추가적인 정보가 존재하지 않습니다.

## 13 폐기시 주의사항

- **폐기물처리방법**
- 권고권고 **생물** 쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.
- **비위생적 포장포장**
- 권고권고 **생물** 의지침에입각한쓰레기처리.

## 14 운송에 필요한 정보

### 유엔 유엔번호

- ADR, IMDG, IATA
- 누락되다

### 적정적정명명

- ADR, IMDG, IATA
- 누락되다

### 교통 교통위험위험

- ADR, ADN, IMDG, IATA

### 등급등급등급

누락되다

### 용기등급

- ADR, IMDG, IATA
- 누락되다

### 환경적 유해물질:

해당사항 없음.

### 이동지특별특별조치

해당사항 없음.

### MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따라

### 별다른 별다른 운송운송

해당사항 없음.

### ADR, IMDG, IATA 규제

누락되다

# 물질안전보건자료

## GHS에 따라 라다

인쇄일자: 2020.04.10

개정: 2020.04.10

**제품명: TECHNOVIT 8100 - LIQUID**

(6 쪽부터 계속)

### 15 법적 규제현황

· 산업안전보건법에 의한 규제

**제조제조금지물질:**

어떠한내용물도 목록화되어있지않다

· 허가대상물질:

어떠한내용물도 목록화되어있지않다

· 관리대상유해물질:

어떠한내용물도 목록화되어있지않다

· 작업환경측정 대상 유해인자

어떠한내용물도 목록화되어있지않다

· 특수건강 집광 대상 유해인자

어떠한내용물도 목록화되어있지않다

해당 해당 수물질 또는 혼합 물에 대한 안전보건자료 작성 관련 법률

· Korean Existing Chemical Inventory

868-77-9 2-hydroxyethyl methacrylate

KE-25025

109-59-1 2-isopropoxyethanol

KE-23948

· 화학물질관리법

· 사고대비물질

어떠한내용물도 목록화되어있지않다

· 금지물질

어떠한내용물도 목록화되어있지않다

· 제한물질

어떠한내용물도 목록화되어있지않다

· 유독물질

어떠한내용물도 목록화되어있지않다

· 허가물질

어떠한내용물도 목록화되어있지않다

· 위험물안전관리법 (위험물 및 지정수량) 제 4: 4,000 리터

**등록 등록 대상 선제 대상 화학물질**

어떠한내용물도 목록화되어있지않다

· '21년까지 등록하여야 할 압, 들연번이, 생식능력 이상을 일으키거나 일으킬 우려가 있는 기존 화학물질

어떠한내용물도 목록화되어있지않다

· 중점관리물 점량 지정 지정

· 표1 중점관리물질(제한 관련 관련)

어떠한내용물도 목록화되어있지않다

· 표2 중점관리물질(제한 관련 관련)

어떠한내용물도 목록화되어있지않다

· 라벨 라벨 요소

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

(8 쪽에 계속)



# 安全資料表

## 據根根據據據性化學品標示及通識規則

打印日期 2020.04.10

在 2020.04.10 審核

### 1 化學品與廠商資料

- 產品識別者
- 化學品中文名稱名稱名稱化學品俗名或商品名: TECHNOVIT 8100 - LIQUID
- 商品編號: 14654
- 相應純物質或者混合物的相關下位用途及禁止用途 無相關詳細資料。
- 原材料的應用/準備工作進行 實驗室化學物
- 安全技術說明書內供應商詳細信息
- 企業名稱:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: info@emsdiasum.com  
www.emsdiasum.com
- 可獲取更多資料的部門: Product safety department
- 緊急聯繫電話號碼:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 危害辨識資料

- 緊急情況概述:  
無色的，流體，造成皮膚刺激。造成嚴重眼睛刺激。可能造成皮膚過敏。

- GHS危險性類別



腐蝕/刺激皮膚物質 第2級 H315 造成皮膚刺激  
嚴重損傷/刺激眼睛物質 第2A級 H319 造成嚴重眼睛刺激  
皮膚過敏物質 第1級 H317 可能造成皮膚過敏

- 標籤因素

- GHS標籤元素 本產品根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。
- 圖示圖示圖示



GHS07

#### 名稱名稱名稱

- 標籤上辨別危險的成份:  
甲基丙烯酸-2-羥基乙酯
- 危險字句  
造成皮膚刺激  
造成嚴重眼睛刺激  
可能造成皮膚過敏
- 警戒字句
- 預防措施  
避免吸入粉塵/煙/氣體/煙霧/蒸氣/噴霧。  
戴防護手套/防護眼罩/防護面具。

(在 2 頁繼續)

# 安全資料表

## 據根據據據性化學品標示及通識規則

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(在 1 頁繼續)

- **事故響應**  
如進入眼睛：用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出，取出隱形眼鏡。繼續清洗。  
如發生皮膚刺激或皮疹：求醫治療/諮詢。  
如仍覺眼睛有刺激：求醫治療/諮詢。
- **廢棄處置**  
按照地方/區域/國家/國際法規處理內容物之廢棄/容器。
- **其他有害性**
- PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質) 評價結果
- PBT(殘留性、生物濃縮性、毒性物質) 不適用的
- vPvB(高殘留性、高生物濃縮性物質): 不適用的

### 3 成分辨識資料

- **混合物**  
描述描述描述以下含有無害添加劑的成分組成的混合物

· 危險的成分:		
868-77-9	甲基丙烯酸-2-羥基乙酯 ⚠ 腐蝕/刺激皮膚物質 第2級, H315; 嚴重損傷/刺激眼睛物質 第2級, H319; 皮膚過敏物質 第1級, H317	>50-≤100%
109-59-1	2- 異丙氧基乙醇 ⚠ 易燃液體 第3級, H226; ⚠ 急毒性物質(皮膚) 第4級, H312; 急毒性物質(吸入) 第4級, H332; 嚴重損傷/刺激眼睛物質 第2級, H319	>2.5-≤10%

### 4 急救措施

- **應急措施要領**
- 吸入吸入吸入  
供給新鮮空氣並且確保會叫醫生。  
萬一病人不清醒時,請讓病人側躺以便移動。
- **皮膚接觸**: 馬上用水和肥皂進行徹底的沖洗。
- **眼睛接觸**: 張開眼睛在流水下沖洗數分鐘. 如果症狀仍然持續,請諮詢醫生。
- 食入食入食入如果症狀仍然持續,請諮詢醫生。
- **給醫生的資料**:  
· **最重要的急慢性症狀及其影響** 無相關詳細資料。  
· **需要及時的醫療處理及特別處理的症狀** 無相關詳細資料。

### 5 滅火措施

- **滅火方法**
- **滅火的方法和滅火劑**: 二氧化碳 (CO<sub>2</sub>)、滅火粉末或灑水. 使用灑水或抗酒精泡沫滅火劑撲滅較大的火種。
- **特別危險性** 無相關詳細資料。
- **特殊滅火方法**
- **消防人員特殊的防護裝備**: 沒有要求特別的措施。

### 6 洩漏處理方法

- **保護措施** 沒有要求。
- **環境保護措施**: 切勿讓其進入下水道/水面或地下水。

(在 3 頁繼續)

# 安全資料表

## 據根根據據性化學品標示及通識規則

打印日期 2020.04.10

在 2020.04.10 審核

化學品中文名稱名稱名稱化學品俗名或商品名：TECHNOVIT 8100 - LIQUID

(在 2 頁繼續)

- **密封及淨化方法和材料:**  
吸收液體粘合原料 (沙粒、矽藻土、酸性粘合劑、通用粘合劑、鋸屑).  
確保有足夠的通風裝置.
- **參照其他部分**  
有關安全處理的資料請參閱第 7 節.  
有關個人保護裝備的資料請參閱第 8 節.  
有關棄置的資料請參閱第 13 節.

## 7 安全處置與儲存方法

- **操作處置**
- **儲存**  
確保工作間有良好的通風/排氣裝置.  
防止氣溶膠的形成.
- **有關火災及防止爆炸的資料:** 不需特別的措施.
- **混合危險性等安全儲存條件**
- **儲存**  
· **儲存庫和容器須要達到的要求:** 沒有特別的要求.  
· **有關使用一個普通的儲存設施來儲存的資料:** 不需要.  
· **有關儲存條件的更多資料:** 將容器密封.  
· **具體的最終用戶** 無相關詳細資料.

## 8 暴露預防措施

- **工程控制方法:** 沒有進一步數據,見第 7 項.
- **控制變數**

### 在工作場需要監控的限值成分

109-59-12- 異丙氧基乙醇

PEL (TW) | PC-TWA: 106 mg/m<sup>3</sup>, 25 ppm

- **額外的資料:** 制作期間有效的清單將作為基礎來使用.
- **遺漏控制**
- **個人防護設備:**
- **一般保護和衛生措施:**  
遠離食品、飲料和飼料.  
立即除去所有的不潔的和被污染的衣服.  
在休息之前和工作完畢後請清洗雙手.  
避免和眼睛及皮膚接觸.
- **呼吸系統防護:**  
如果會短暫接觸或在低污染的情況下,請使用呼吸過濾裝置. 如果會深入或較長時間接觸,請使用獨立的呼吸保護裝置.
- **手防護:**



保護手套

手套的物料必須是不滲透性的,且能抵抗該產品/物質/添加劑.  
基於缺乏測試,對於產品/制劑/化學混合物,並不會提供手套材料的建議  
選擇手套材料時,請注意材料的滲透時間,滲濾率和降解參數

(在 4 頁繼續)



# 安全資料表

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(在 3 頁繼續)

- **手套材料**  
選擇合適的手套不單取決於材料，亦取決於質量特征，以及來自哪一間生產廠家，因為該產品是由很多材料配制而成，手套材料的抵抗力並不可預計，所以，必須在使用之前進行檢查
- **滲入手套材料的時間** 請向勞保手套生產廠家獲取準確的破裂時間並觀察實際的破裂時間
- **眼睛防護：**



密封的護目鏡

### 9 物理及化學性質

· <b>有關基本物理及化學特性的資訊</b>	
· <b>一般說明</b>	
外觀外觀外觀	
形狀形狀形狀	流體
顏色顏色顏色	無色的
氣味氣味氣味	有特性的
· <b>嗅覺閾限</b>	未決定.
· <b>pH值:</b>	未決定.
· <b>條件的更改</b>	
熔點熔點熔點	未確定的
沸點沸點沸點	沸點和沸程: 142 °C
閃點閃點閃點	97 °C
· <b>可燃性 (固體、氣體):</b> 不適用的	
· <b>點火溫度:</b>	345 °C
· <b>分解溫度:</b>	未決定.
· <b>自燃溫度:</b>	該產品是不自燃的
· <b>爆炸的危險性:</b>	該產品並沒有爆炸的危險
· <b>爆炸極限:</b>	
較低較低較低	1.6 Vol %
較高較高較高	13 Vol %
蒸氣蒸氣蒸氣 20 °C:	3.5 hPa
密度密度密度 0 °C:	
· <b>相對密度</b>	未決定.
· <b>蒸氣密度</b>	未決定.
· <b>蒸發速率</b>	未決定.
· <b>溶解性</b>	
· <b>水:</b>	不能拌和的 或難以拌和
· <b>n-辛醇/水係數</b>	未決定.
· <b>黏性:</b>	
· <b>動態</b>	未決定.
· <b>運動學的</b>	未決定.

(在 5 頁繼續)

# 安全資料表

## 據根據據據性化學品標示及通識規則

打印日期 2020.04.10

在 2020.04.10 審核

化學品中文名稱名稱名稱化學品俗名或商品名：TECHNOVIT 8100 - LIQUID

(在 4 頁繼續)

### · 溶劑成份:

· 固體成份: 0.0 %  
· 其他資訊 無相關詳細資料。

## 10 安定性及反應性

- 穩定穩定穩定
- 應度應性應相關詳細資料。
- 分解分解分解免的情況: 如果遵照規格使用則不會分解。
- 有害有應有應可能無 未有已知的危險反應。
- 避應避免避條件 無相關詳細資料。
- 不相容的物質: 無相關詳細資料。
- 危險的分解產物: 未知有危險的分解產品。

## 11 毒性資料

- 對毒性學影響的資訊
  - 急性毒性:
  - 與分類相關的 LD/LC50 值:
- |                   |      |                   |
|-------------------|------|-------------------|
| 868-77-基用基酸基酸基乙基乙 |      |                   |
| 口腔                | LD50 | 5,050 mg/kg (rat) |
- 要的調調調調影響:
  - 皮膚皮膚皮膚刺激皮膚和粘膜。
  - 在眼睛上面: 刺激的影響。
  - 致敏致敏致敏作用過皮膚接觸可能造成敏化作用。
  - 更多毒物的資料:
  - 根據有關配製的一般歐盟分類指南的計算方法 (刊印在最新版本),該產品顯示以下的危險:  
刺激性的

## 12 生態資料

- 毒態毒性毒性
- 水生毒性: 無相關詳細資料。
- 持久性和降解性相關詳細資料。
- 環境系統習性:
- 潛在的累積累積相關詳細資料。
- 土壤土壤動動性相關詳細資料。
- 額外的生態學資料:
- 總括注解:
- 水危害級別 1(德國規例) (通過名單進行自我評估): 對水是稍微危害的  
不要讓未稀釋或大量的產品接觸地下水、水道或者汗水系統。
- PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質)評價結果
- PBT(殘留性、生物濃縮性、毒性物質) 不適用的
- vPvB(高殘留性、高生物濃縮性物質): 不適用的
- 其他其他其他用相關詳細資料。

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(在 6 頁繼續)

# 安全資料表

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在 2020.04.10 審核

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(在 5 頁繼續)

### 13 廢棄處置方法

- 廢棄處置方法  
建議建議建議將該產品和家居垃圾一起丟棄. 不要讓該產品接觸汗水系統.
- 受污染的容器和包裝:  
建議建議建議根據官方的規章來丟棄.

### 14 運送資料

聯合聯合國危險貨物編號(UN號)	
· ADR, IMDG, IATA	無效
適當適當罐頭名	
· ADR, IMDG, IATA	無效
運輸運輸運輸等級	
· ADR, ADN, IMDG, IATA	
· 級別	無效
· 包裝組別	
· ADR, IMDG, IATA	無效
· 危害環境:	不適用的
· 用戶特別預防措施	不適用的
· MARPOL73/78(針對船舶引起的海洋污染預防預防協約 件附件書根據根據國際國際貨物運輸規則)值大量大量 運送運送運送	不適用的
· UN "標準規定":	無效

### 15 法規資料

· 對相應純物質或者混合物的安全、保健及環境法規/法律	
· 優先管理化學品之指定及運作管理辦法	
附表附表對於未滿十八歲區域區域婦女未滿女性女性雙工具危害性之化學品	沒有列出成份
第二第二條第二款第一目	沒有列出成份
第二第二條第二款第二目	沒有列出成份
· 新化學物質及既有化學物質資料登錄辦法 英	沒有列出成份
· 國現現化學物質名錄	列出所有成分
· TCSCA	
列管編號編號	沒有列出成份

(在 7 頁繼續)

# 安全資料表

## 據根根據據據性化學品標示及通識規則

打印日期 2020.04.10

在 2020.04.10 審核

化學品中文名稱名稱名稱： TECHNIVIT 8100 - LIQUID

(在 6 頁繼續)

· **毒性分類**

沒有列出成份

· **管制濃度 ( w/w% )**

沒有列出成份

· **大量運作基準(公斤)**

沒有列出成份

· **新化學物質及既有化學物質資料登錄辦法, 附表六**

沒有列出成份

· **TCSI - Taiwan Chemical Substance Inventory**

列出所有成分

· **GHS標籤元素** 本產品根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。

圖示圖示圖示



GHS07

名稱名稱名稱

· **標籤上辨別危險的成份:**

甲基丙烯酸-2-羥基乙酯

· **危險字句**

造成皮膚刺激

造成嚴重眼睛刺激

可能造成皮膚過敏

· **警戒字句**

· **預防措施**

避免吸入粉塵/煙/氣體/煙霧/蒸氣/噴霧。

戴防護手套/防護眼罩/防護面具。

· **事故響應**

如進入眼睛：用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出，取出隱形眼鏡。繼續清洗。

如發生皮膚刺激或皮疹：求醫治療/諮詢。

如仍覺眼睛有刺激：求醫治療/諮詢。

· **廢棄處置**

按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

· **化學物質安全性評價:** 尚未進行化學物質安全性評價

## 16 其他資料

該資料是基於我們目前的知識。然而,這並不構成對任何特定產品特性的擔保並且不建立一個法律上有效的合同關係。

· **縮寫:**

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: 持久性生物累積性有毒物質

(在 8 頁繼續)

# 安全資料表

## 據根據據據性化學品標示及通識規則

打印日期 2020.04.10

在 2020.04.10 審核

**化學品中文名稱名稱名稱： TECHNIVIT 8100 - LIQUID**

(在 7 頁繼續)

vPvB: very Persistent and very Bioaccumulative

易燃液體 第3級: Flammable liquids – Category 3

急性物質(皮膚) 第4級: Acute toxicity – Category 4

腐蝕/刺激皮膚物質 第2級: Skin corrosion/irritation – Category 2

嚴重損傷/刺激眼睛物質 第2級: Serious eye damage/eye irritation – Category 2

嚴重損傷/刺激眼睛物質 第2A級: Serious eye damage/eye irritation – Category 2A

皮膚過敏物質 第1級: Skin sensitisation – Category 1

-TW-

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

Trykkdato: 10.04.2020

revidert den: 10.04.2020

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

- **1.1 Produktidentifikator**
- **Handelsnavn: TECHNOVIT 8100 - LIQUID**
- **Artikkelnummer: 14654**
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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**



GHS07

- *Skin Irrit. 2 H315 Irriterer huden.*
- *Eye Irrit. 2 H319 Gir alvorlig øyeirritasjon.*
- *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**



GHS07

- **Varselord** Advarsel
- **Farebestemmende komponenter ved etikettering:**  
2-hydroksyetylmetakrylat
- **Faresetninger**  
*H315 Irriterer huden.*  
*H319 Gir alvorlig øyeirritasjon.*  
*H317 Kan utløse en allergisk hudreaksjon.*
- **Sikkerhetssetninger**  
*P261 Unngå innånding av støv/røyk/gass/tåke/damp/aerosoler.*  
*P280 Benytt vernehansker/øyevern/ansiktsvern.*

(fortsatt på side 2)

# Sikkerhetsdatablad

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

Trykkdato: 10.04.2020

revidert den: 10.04.2020

**Handelsnavn: TECHNOVIT 8100 - LIQUID**

(fortsatt fra side 1)

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.

P333+P313 Ved hudirritasjon eller utslett: Søk legehjelp.

P337+P313 Ved vedvarende øyeirritasjon: Søk legehjelp.

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: 868-77-9 EINECS: 212-782-2	2-hydroksyetylmetakrylat ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	>50-≤100%
CAS: 109-59-1 EINECS: 203-685-6	2-isopropoksyetanol ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	>2,5-≤10%

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

### Avsnitt 4: Førstehjelpstiltak

- **4.1 Beskrivelse av førstehjelpstiltak**
- **Etter innånding:**  
Rikelig frisklufertilførsel, søk legehjelp for sikkerhets skyld.  
Ved bevisstløshet lagring og transport i stabil sidestilling.
- **Etter hudkontakt:** Vask straks med vann og sepe og skyll godt etterpå.
- **Etter øyekontakt:**  
Skyll øynene med åpne øyenlokk i flere minutter under rennende vann. Ved fortsatt besvær tilkall lege.
- **Etter svelging:** Ved fortsatt besvær må lege konsulteres.
- **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 Sløkkingsmidler**
- **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.

NO

(fortsatt på side 3)

# Sikkerhetsdatablad

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

Trykkdato: 10.04.2020

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(fortsatt fra side 2)

## Avsnitt 6: Tiltak ved utilsiktede utslipp

- **6.1 Personlige forsiktighetsregler, personlig verneutstyr og nødrutiner** Ikke nødvendig.
- **6.2 Forsiktighetsregler med hensyn til miljø** 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).  
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 informasjon om lagervilkårene:** Hold beholderne tett tillukket.
- **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 Kontrollparametere

- **Komponenter med grenseverdier for arbeidsplass som må overholdes:**

<b>868-77-9 2-hydroksyetylmetakrylat</b>	
AG	Langtidsverdi: 11 mg/m <sup>3</sup> , 2 ppm
A	
<b>109-59-1 2-isopropoksyetanol</b>	
AG	Langtidsverdi: 80 mg/m <sup>3</sup> , 20 ppm

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

### 8.2 Eksponeringskontroll

#### Personlig verneutstyr:

#### Generelle verne- og hygienetiltak:

Holdes adskilt fra næringsmidler, drikkevarer og fórstoffer.

Fjern omgående forurensede, gjennomvåtede klær.

Vask hendene før arbeidspauser og ved arbeidets slutt.

Unngå berøring med øyne og hud.

#### Åndedrettsvern:

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

(fortsatt på side 4)



# Sikkerhetsdatablad

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

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(fortsatt fra side 3)

· **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/kjemikalieblanding.

Hanskematerialet velges under hensyntagen til holdbarhetstid, gjennomtrengelighet og degradering.

· **hanskemateriale**

Valget av egnet hanske er ikke bare avhengig av materiale, men også av andre kvalitetskjenner og er forskjellig fra produsent til produsent. Da produktet representerer en sammensetning av flere stoffer, kan holdbarheten av hanskematerialet ikke forhåndsberegnes, 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:** Flytende

**Farge:** Fargeløs

· **Lukt:** Karakteristisk

· **Lukterskel:** Ikke bestemt.

· **pH-verdi:** Ikke bestemt.

· **Tilstandsendring**

**Smeltepunkt/frysepunkt:** Ikke bestemt.

**Startkokepunkt og kokeområde:** 142 °C

· **Flammepunkt:** 97 °C

· **Antennelighet (fast stoff, gass):** Ikke brukbar.

· **Antennelsestemperatur:** 345 °C

· **Nedbrytingstemperatur:** Ikke bestemt.

· **Selvantennelsestemperatur:** Produktet er ikke selvantennelig.

· **Eksplorative egenskaper:** Produktet er ikke eksplosjonsfarlig.

· **Ekspljosjonsgrenser:**

**Nedre:** 1,6 Vol %

**Øvre:** 13 Vol %

· **Damptrykk ved 20 °C:** 3,5 hPa

· **Tetthet ved 20 °C:** 1 g/cm<sup>3</sup>

· **Relativ tetthet:** Ikke bestemt.

(fortsatt på side 5)

# Sikkerhetsdatablad

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· <b>Damp tetthet:</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: 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 spaltningsprodukter kjente.

### Avsnitt 11: Toksikologiske opplysninger

- **11.1 Opplysninger om toksikologiske virkninger**
- **Akutt giftighet** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.

#### · **Klassifiseringsrelevante LD/LC50-verdier:**

868-77-9 2-hydroksyetylmetakrylat

Oral	LD50	5.050 mg/kg (rat)
------	------	-------------------

- **Primær irritasjonsvirkning:**
- **Hudetsing/hudirritasjon**  
Irriterer huden.
- **Alvorlig øyeskade/øyeirritasjon**  
Gir alvorlig øyeirritasjon.
- **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 kjønnseller** Basert på tilgjengelige data, klassifiseringskriteriene ikke oppfylt.
- **Kreftframkallende 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.

NO

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# Sikkerhetsdatablad

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

Trykkdato: 10.04.2020

revidert den: 10.04.2020

Handelsnavn: **TECHNOVIT 8100 - LIQUID**

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### 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.
- **Ytterligere økologiske informasjoner:**
- **Generelle informasjoner:**  
Vannfareklasse 1 (D) (Selvklassifisering): lett farlig for vann  
Ikke la stoffet komme ufortynnet ned i grunnvannet, i vassdrag eller i kloakker.
- **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.
- **Ikke rengjort emballasje:**
- **Anbefaling:** Deponering i henhold til myndighetenes forskrifter.

### Avsnitt 14: Transportopplysninger

- |  |               |
|--|---------------|
| · <b>14.1 FN-nummer</b><br>· <b>ADR, IMDG, IATA</b>                                      | bortfaller    |
| · <b>14.2 FN-forsendelsesnavn</b><br>· <b>ADR, IMDG, IATA</b>                            | bortfaller    |
| · <b>14.3 Transportfareklasse(r)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>klasse</b> | bortfaller    |
| · <b>14.4 Emballasjegruppe</b><br>· <b>ADR, IMDG, IATA</b>                               | bortfaller    |
| · <b>14.5 Miljøfarer</b>   | Ikke brukbar. |
| · <b>14.6 Særlige forsiktighetsregler ved bruk</b>                                       | Ikke brukbar. |
| · <b>14.7 Bulktransport i henhold til vedlegg II til MARPOL 73/78 og IBC-regelverket</b> | Ikke brukbar. |
| · <b>UN "Model Regulation":</b>  | bortfaller    |

### Avsnitt 15: Opplysninger om regelverk

- **15.1 Særlige bestemmelser / særskilt lovgivning om sikkerhet, helse og miljø for stoffet eller stoffblandingen**
- **Direktiv 2012/18/EU**
- **Spesifiserte farlige stoffer - VEDLEGG I** ingen av innholdsstoffene er listet opp

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# Sikkerhetsdatablad

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

Trykkdato: 10.04.2020

revidert den: 10.04.2020

**Handelsnavn: TECHNOVIT 8100 - LIQUID**

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- **Forordning (EF) nr. 1907/2006 VEDLEGG XVII Begrensninger: 3**
- **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 produktens egenskaper og er ikke grunnlag for noe kontraktmessig rettsforhold.

#### · Relevante satser

- H226 Brannfarlig væske og damp.
- H312 Farlig ved hudkontakt.
- H315 Irriterer huden.
- H317 Kan utløse en allergisk hudreaksjon.
- H319 Gir alvorlig øyeirritasjon.
- H332 Farlig ved innånding.

#### · 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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 3: Brannfarlige væsker – Kategori 3
- Acute Tox. 4: Akutt giftighet – Kategori 4
- Skin Irrit. 2: Hudetsing/hudirritasjon – Kategori 2
- Eye Irrit. 2: Alvorlig øyeskade/øyeirritasjon – Kategori 2
- Skin Sens. 1: Hudsensibilisering – Kategori 1

NO

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 10.04.2020

Revisión: 10.04.2020

### SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

- **1.1 Identificador del producto**
- **Nombre comercial:** TECHNOVIT 8100 - LIQUID
- **Número del artículo:** 14654
- **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: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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](mailto: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**



GHS07

- Skin Irrit. 2 H315 Provoca irritación cutánea.
- Eye Irrit. 2 H319 Provoca irritación ocular grave.
- 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.
- **Pictogramas de peligro**



GHS07

- **Palabra de advertencia** Atención
- **Componentes peligrosos a indicar en el etiquetaje:**  
metacrilato de 2-hidroxietilo

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### · Indicaciones de peligro

- H315 Provoca irritación cutánea.
- H319 Provoca irritación ocular grave.
- H317 Puede provocar una reacción alérgica en la piel.

### · Consejos de prudencia

- P261 Evitar respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol.
- P280 Llevar guantes de protección / gafas de protección / máscara de protección.
- P305+P351+P338 EN CASO DE CONTACTO CON LOS OJOS: Enjuagar con agua cuidadosamente durante varios minutos. Quitar las lentes de contacto cuando estén presentes y pueda hacerse con facilidad. Proseguir con el lavado.
- P333+P313 En caso de irritación o erupción cutánea: Consultar a un médico.
- P337+P313 Si persiste la irritación ocular: Consultar a un médico.
- 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: 868-77-9 EINECS: 212-782-2	metacrilato de 2-hidroxietilo ----- ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	>50-≤100%
CAS: 109-59-1 EINECS: 203-685-6	2-isopropoxietanol ----- ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	>2,5-≤10%

· **Indicaciones adicionales:** El texto de los posibles riesgos aquí indicados se puede consultar en el capítulo 16.

## SECCIÓN 4: Primeros auxilios

### · 4.1 Descripción de los primeros auxilios

#### · 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:

Limpiar los ojos abiertos durante varios minutos con agua corriente. En caso de trastornos persistentes consultar un médico.

· **En caso de ingestión:** Consultar un médico si los trastornos persisten.

· **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.

ES

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# Ficha de datos de seguridad

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### 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** No es necesario.
- **6.2 Precauciones relativas al medio ambiente:**  
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).  
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.

### 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:**

#### 109-59-1 2-isopropoxietanol

LEP	Valor de larga duración: 22 mg/m <sup>3</sup> , 5 ppm vía dérmica
-----	--

- **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.

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### · 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 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.

#### · 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:** Característico

· **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:** 142 °C

· **Punto de inflamación:** 97 °C

· **Inflamabilidad (sólido, gas):** No aplicable.

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· <b>Temperatura de ignición:</b>	345 °C
· <b>Temperatura de descomposición:</b>	No determinado.
· <b>Temperatura de auto-inflamación:</b>	El producto no es autoinflamable.
· <b>Propiedades explosivas:</b>	El producto no es explosivo.
· <b>Límites de explosión:</b>	
<b>Inferior:</b>	1,6 Vol %
<b>Superior:</b>	13 Vol %
· <b>Presión de vapor a 20 °C:</b>	3,5 hPa
· <b>Densidad a 20 °C:</b>	1 g/cm <sup>3</sup>
· <b>Densidad relativa</b>	No determinado.
· <b>Densidad de vapor</b>	No determinado.
· <b>Tasa de evaporación:</b>	No determinado.
· <b>Solubilidad en / miscibilidad con agua:</b>	Poco o no mezclable.
· <b>Coefficiente de reparto: n-octanol/agua:</b>	No determinado.
· <b>Viscosidad:</b>	
<b>Dinámica:</b>	No determinado.
<b>Cinemática:</b>	No determinado.
· <b>Concentración del disolvente:</b>	
<b>VOC (CE)</b>	0,00 %
<b>Contenido de cuerpos sólidos:</b>	0,0 %
· <b>9.2 Otros datos</b>	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** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

· **Valores LD/LC50 (dosis letal /dosis letal = 50%) relevantes para la clasificación:**

868-77-9 metacrilato de 2-hidroxiethyl

Oral	LD50	5.050 mg/kg (rat)
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- **Efecto estimulante primario:**
- **Corrosión o irritación cutáneas**  
Provoca irritación cutánea.

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- **Lesiones o irritación ocular graves**  
Provoca irritación ocular grave.
- **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.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**  
Nivel de riesgo para el agua 1 (autoclasiación): escasamente peligroso para el agua  
En estado no diluido o no neutralizado, no dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.
- **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** suprimido
- **14.2 Designación oficial de transporte de las Naciones Unidas**
- **ADR, IMDG, IATA** suprimido
- **14.3 Clase(s) de peligro para el transporte**
- **ADR, ADN, IMDG, IATA**
- **Clase** suprimido

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- |   |               |
|---|---------------|
| · <b>14.4 Grupo de embalaje</b><br>· <b>ADR, IMDG, IATA</b>                                   | suprimido     |
| · <b>14.5 Peligros para el medio ambiente:</b>  | No aplicable. |
| · <b>14.6 Precauciones particulares para los usuarios</b>                                     | No aplicable. |
| · <b>14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC</b> | No aplicable. |
| · <b>"Reglamentación Modelo" de la UNECE:</b>   | suprimido     |

### 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
- **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

- H226 Líquidos y vapores inflamables.
- H312 Nocivo en contacto con la piel.
- H315 Provoca irritación cutánea.
- H317 Puede provocar una reacción alérgica en la piel.
- H319 Provoca irritación ocular grave.
- H332 Nocivo en caso de inhalación.

#### · 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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 3: Líquidos inflamables – Categoría 3
- Acute Tox. 4: Toxicidad aguda - cutánea – Categoría 4
- Skin Irrit. 2: Corrosión o irritación cutáneas – Categoría 2
- Eye Irrit. 2: Lesiones oculares graves o irritación ocular – Categoría 2
- Skin Sens. 1: Sensibilización cutánea – Categoría 1

**Säkerhetsdatablad**  
enligt förordning (EG) nr. 1907/2006, Artikel 31

Datum för utskrift: 10.04.2020

Omarbetad: 10.04.2020

### AVSNITT 1: Namnet på ämnet/blandningen och bolaget/företaget

- **1.1 Produktbeteckning**
- **Handelsnamn: TECHNOVIT 8100 - LIQUID**
- **Artikelnummer: 14654**
- **1.2 Relevanta identifierade användningar av ämnet eller blandningen och användningar som det avråds från**  
Ingen ytterligare relevant information finns till förfogande.
- **Ämnets användning / tillredningen** Laboratoriekemikalier
- **1.3 Närmare upplysningar om den som tillhandahåller säkerhetsdatablad**
- **Tillverkare/leverantör:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [info@emsdiasum.com](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Område där upplysningar kan inhämtas:** Product safety department
- **1.4 Telefonnummer för nödsituationer:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### AVSNITT 2: Farliga egenskaper

- **2.1 Klassificering av ämnet eller blandningen**
- **Klassificering enligt förordning (EG) nr 1272/2008**



GHS07

Skin Irrit. 2 H315 Irriterar huden.  
Eye Irrit. 2 H319 Orsakar allvarlig ögonirritation.  
Skin Sens. 1 H317 Kan orsaka allergisk hudreaktion.

- **2.2 Märkningsuppgifter**
- **Märkning enligt förordning (EG) nr 1272/2008** Produkten är klassificerad och märkt enligt CLP-förordningen.
- **Faropiktogram**



GHS07

- **Signalord** Varning
- **Riskbestämmande komponenter för etikettering:**  
2-hydroxietylmetakrylat
- **Faroangivelser**  
H315 Irriterar huden.  
H319 Orsakar allvarlig ögonirritation.  
H317 Kan orsaka allergisk hudreaktion.
- **Skyddsangivelser**  
P261 Undvik att inandas damm/rök/gaser/dimma/ångor/sprej.  
P280 Använd skyddshandskar / ögonskydd / ansiktsskydd.  
P305+P351+P338 VID KONTAKT MED ÖGONEN: Skölj försiktigt med vatten i flera minuter. Ta ur eventuella kontaktlinser om det går lätt. Fortsätt att skölja.

(Fortsättning på sida 2)

# Säkerhetsdatablad

## enligt förordning (EG) nr. 1907/2006, Artikel 31

Datum för utskrift: 10.04.2020

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**Handelsnamn: TECHNOVIT 8100 - LIQUID**

(Fortsättning från sida 1)

P333+P313 Vid hudirritation eller utslag: Sök läkarhjälp.  
 P337+P313 Vid bestående ögonirritation: Sök läkarhjälp.  
 P501 Innehållet / behållaren avfallshanteras enligt lokala / regionala / nationella / internationella föreskrifter.

- **2.3 Andra faror**
- **Resultat av PBT- och vPvB-bedömningen**
- **PBT:** Ej användbar.
- **vPvB:** Ej användbar.

### AVSNITT 3: Sammansättning/information om beståndsdelar

- **3.2 Kemisk karakterisering: Blandningar**
- **Beskrivning:** Blandning bestående av nedan upplistade ämnen med ofarliga tillsatser.

#### · Farliga ingredienser:

CAS: 868-77-9 EINECS: 212-782-2	2-hydroxietylmetakrylat ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	>50-≤100%
CAS: 109-59-1 EINECS: 203-685-6	2-isopropoxietanol ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	>2,5-≤10%

- **Ytterligare hänvisningar:** De angivna farohänvisningarnas ordalydelse framgår av kapitel 16.

### AVSNITT 4: Åtgärder vid första hjälpen

- **4.1 Beskrivning av åtgärder vid första hjälpen**
- **Vid inandning:**  
Riklig tillförsel av friskluft, kontakta läkare för säkerhets skull.  
Vid medvetlöshet lägg och transportera patient stabilt i framstupa sidoläge.
- **Vid kontakt med huden:** Tvätta omedelbart med vatten och tvål och spola därefter noggrant.
- **Vid kontakt med ögonen:**  
Spola ögonen öppna i flera minuter under rinnande vatten. Om besvär kvarstår, kontakta läkare.
- **Vid förtäring:** Om besvär kvarstår, kontakta läkare.
- **4.2 De viktigaste symptomen och effekterna, både akuta och fördröjda**  
Ingen ytterligare relevant information finns till förfogande.
- **4.3 Angivande av omedelbar medicinsk behandling och särskild behandling som eventuellt krävs**  
Ingen ytterligare relevant information finns till förfogande.

### AVSNITT 5: Brandbekämpningsåtgärder

- **5.1 Släckmedel**
- **Lämpliga släckningsmedel:**  
CO<sub>2</sub>, släckningspulver eller spridd vattenstråle. Större bränder skall bekämpas med spridd vattenstråle eller alkoholbeständigt skum.
- **5.2 Särskilda faror som ämnet eller blandningen kan medföra**  
Ingen ytterligare relevant information finns till förfogande.
- **5.3 Råd till brandbekämpningspersonal**
- **Speciell skyddsutrustning:** Inga speciella åtgärder krävs.

### AVSNITT 6: Åtgärder vid oavsiktliga utsläpp

- **6.1 Personliga skyddsåtgärder, skyddsutrustning och åtgärder vid nödsituationer** Erfordras ej.

(Fortsättning på sida 3)

# Säkerhetsdatablad

## enligt förordning (EG) nr. 1907/2006, Artikel 31

Datum för utskrift: 10.04.2020

Omarbetad: 10.04.2020

**Handelsnamn: TECHNOVIT 8100 - LIQUID**

(Fortsättning från sida 2)

- **6.2 Miljöskyddsåtgärder:** Förhindra produkten att tränga ner i avloppsnät/ytvatten/grundvatten.
- **6.3 Metoder och material för inneslutning och sanering:**  
Sug upp med vätskebindande material (sand, kiselgur, syrabindemedel, universalbindemedel, sågspån).  
Se till att ventilationen är tillräcklig.
- **6.4 Hänvisning till andra avsnitt**  
Information beträffande säker hantering se kapitel 7.  
Information beträffande personlig skyddsutrustning se kapitel 8.  
Information beträffande avfallshantering se kapitel 13.

### AVSNITT 7: Hantering och lagring

- **7.1 Försiktighetsmått för säker hantering**  
Sörj för god ventilation/utsug på arbetsplatsen.  
Undvik bildning av aerosol.
- **Hänvisningar beträffande brand- och explosionsskydd:** Inga speciella åtgärder krävs.
- **7.2 Förhållanden för säker lagring, inklusive eventuell oförenlighet**
- **Lagring:**
- **Krav på lagerutrymmen och behållare:** Inga speciella krav.
- **Hänvisningar beträffande sammanlagring:** Erfordras ej.
- **Ytterligare uppgifter till lagringsvillkoren:** Förvara behållaren tätt tillsluten.
- **7.3 Specifik slutanvändning** Ingen ytterligare relevant information finns till förfogande.

### AVSNITT 8: Begränsning av exponeringen/personligt skydd

- **Ytterligare hänvisningar beträffande utformning av tekniska anläggningar:** Inga övriga uppgifter, se punkt 7.

#### 8.1 Kontrollparametrar

- **Ämnen med yrkeshygieniska gränsvärden som bör övervakas:**

#### 109-59-1 2-isopropoxietanol

OEL	Korttidsvärde: 90 mg/m <sup>3</sup> , 20 ppm
	Nivågränsvärde: 45 mg/m <sup>3</sup> , 10 ppm
	H, V

- **Ytterligare hänvisningar:** De vid framställningen gällande listorna har använts som utgångspunkt.
- **8.2 Begränsning av exponeringen**
- **Personlig skyddsutrustning:**
- **Allmänna skydds- och hygienåtgärder:**  
Undvik kontakt med livsmedel, drycker och fodermedel.  
Nedsmutsade, indränkta klädesplagg skall omedelbart tas av.  
Tvätta händerna före raster och efter arbetet.  
Undvik kontakt med ögonen och huden.
- **Andningsskydd:**  
Vid kortvarig eller ringa belastning - använd andningsfilterutrustning; vid intensiv resp. längre exponering - använd andningsskyddsutrustning som är oberoende av omgivningsluften.
- **Handskydd:**



Skyddshandskar

Handskmaterialet måste vara tätt och beständigt mot produkt/ämne/tillredning.

(Fortsättning på sida 4)

## Säkerhetsdatablad

### enligt förordning (EG) nr. 1907/2006, Artikel 31

Datum för utskrift: 10.04.2020

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**Handelsnamn: TECHNOVIT 8100 - LIQUID**

(Fortsättning från sida 3)

Handskmaterialrekommendationer kan inte ges för produkt/tillredning/kemikalielösning, då inga tester genomförts.

Val av handskmaterial beaktande penetrationstider, permeationskvoter och degradation.

- **Handskmaterial**

Val av lämplig handske är inte enbart beroende av material utan även av andra kvalitetskriterier och varierar från en tillverkare till nästa. Då produkten bereds av flera material, kan handskmaterialets beständighet inte förutses och måste därför kontrolleras före användningen.

- **Handskmaterialets penetreringstid**

Exakt penetrationstid fastställs av skyddshandskarnas tillverkare och skall beaktas.

- **Ögonskydd:**



Tättslutande skyddsglasögon

### AVSNITT 9: Fysikaliska och kemiska egenskaper

- **9.1 Information om grundläggande fysikaliska och kemiska egenskaper**

- **Allmänna uppgifter**

- **Utseende:**

· <b>Form:</b>	Flytande
· <b>Färg:</b>	Färglös
· <b>Lukt:</b>	Karakteristisk
· <b>Lukttröskel:</b>	Ej bestämd.

- **pH-värde:** Ej bestämd.

- **Tillståndsändring**

· <b>Smältpunkt/frys punkt:</b>	Ej bestämd.
· <b>Initial kokpunkt och kokpunktsintervall:</b>	142 °C

- **Flampunkt:** 97 °C

- **Brandfarlighet (fast form, gas):** Ej användbar.

- **Tändtemperatur:** 345 °C

- **Sönderfallstemperatur:** Ej bestämd.

- **Självantändningstemperatur:** Produkten är ej självantändande.

- **Explosiva egenskaper:** Produkten är ej explosiv.

- **Explosionsgränser:**

· <b>Nedre:</b>	1,6 Vol %
· <b>Övre:</b>	13 Vol %

- **Ångtryck vid 20 °C:** 3,5 hPa

· <b>Densitet vid 20 °C:</b>	1 g/cm <sup>3</sup>
· <b>Relativ densitet</b>	Ej bestämd.
· <b>Ångdensitet</b>	Ej bestämd.
· <b>Avdunstningshastighet:</b>	Ej bestämd.

- **Löslighet i / blandbarhet med**

· **Vatten:** Ej resp. föga blandbar.

- **Fördelningskoefficient: n-oktanol/vatten:** Ej bestämd.

(Fortsättning på sida 5)

## Säkerhetsdatablad

### enligt förordning (EG) nr. 1907/2006, Artikel 31

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Omarbetad: 10.04.2020

**Handelsnamn: TECHNOVIT 8100 - LIQUID**

(Fortsättning från sida 4)

· <b>Viskositet:</b>	
<b>Dynamisk:</b>	Ej bestämd.
<b>Kinematisk:</b>	Ej bestämd.
· <b>Lösningsmedelhalt:</b>	
<b>VOC (EG)</b>	0,00 %
<b>Andel av fasta partiklar:</b>	0,0 %
· <b>9.2 Annan information</b>	Ingen ytterligare relevant information finns till förfogande.

### AVSNITT 10: Stabilitet och reaktivitet

- **10.1 Reaktivitet** Ingen ytterligare relevant information finns till förfogande.
- **10.2 Kemisk stabilitet**
- **Termisk sönderdelning / förhållanden som bör undvikas:** Inget sönderfall vid ändamålsenlig användning.
- **10.3 Risken för farliga reaktioner** Inga farliga reaktioner kända.
- **10.4 Förhållanden som ska undvikas** Ingen ytterligare relevant information finns till förfogande.
- **10.5 Oförenliga material:** Ingen ytterligare relevant information finns till förfogande.
- **10.6 Farliga sönderdelningsprodukter:** Inga farliga sönderfallsprodukter kända.

### AVSNITT 11: Toxikologisk information

- **11.1 Information om de toxikologiska effekterna**
- **Akut toxicitet** Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.

#### · Klassificeringsrelevanta LD/LC50-värden:

868-77-9 2-hydroxietylmetakrylat

Oral	LD50	5.050 mg/kg (rat)
------	------	-------------------

- **Primär retningseffekt:**
- **Frätande/irriterande på huden**  
Irriterar huden.
- **Allvarlig ögonskada/ögonirritation**  
Orsakar allvarlig ögonirritation.
- **Luftvägs-/hudsensibilisering**  
Kan orsaka allergisk hudreaktion.
- **CMR-effekter (cancerframkallande, mutagena och reproduktionstoxiska egenskaper)**
- **Mutagenitet i könsceller**  
Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.
- **Cancerogenitet** Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.
- **Reproduktionstoxicitet**  
Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.
- **Specifik organtoxicitet – enstaka exponering**  
Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.
- **Specifik organtoxicitet – upprepad exponering**  
Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.
- **Fara vid aspiration** Kriterierna för klassificering kan på grundval av tillgängliga data inte anses vara uppfyllda.

### AVSNITT 12: Ekologisk information

- **12.1 Toxicitet**
- **Akvatisk toxicitet:** Ingen ytterligare relevant information finns till förfogande.

(Fortsättning på sida 6)



## Säkerhetsdatablad

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(Fortsättning från sida 5)

- **12.2 Persistens och nedbrytbarhet** Ingen ytterligare relevant information finns till förfogande.
- **12.3 Bioackumuleringsförmåga** Ingen ytterligare relevant information finns till förfogande.
- **12.4 Rörlighet i jord** Ingen ytterligare relevant information finns till förfogande.
- **Ytterligare ekologiska hänvisningar:**
- **Allmänna hänvisningar:**  
Vattenföroreningsklass 1 (Självtvärdering): liten risk för vattenförorening.  
Låt ej tränga ner i grundvatten, vattendrag eller i avloppsnätet i utspätt tillstånd resp. i större mängder.
- **12.5 Resultat av PBT- och vPvB-bedömningen**
- **PBT:** Ej användbar.
- **vPvB:** Ej användbar.
- **12.6 Andra skadliga effekter** Ingen ytterligare relevant information finns till förfogande.

### AVSNITT 13: Avfallshantering

- **13.1 Avfallsbehandlingsmetoder**
- **Rekommendation:** Får inte deponeras ihop med hushållsavfall. Får inte tömmas i avloppsnätet.
- **Ej rengjorda förpackningar:**
- **Rekommendation:** Avfallshanteras enligt myndigheters föreskrifter.

### AVSNITT 14: Transportinformation

· <b>14.1 UN-nummer</b> · ADR, IMDG, IATA	Utgår
· <b>14.2 Officiell transportbenämning</b> · ADR, IMDG, IATA	Utgår
· <b>14.3 Faroklass för transport</b> · ADR, ADN, IMDG, IATA · Klass	Utgår
· <b>14.4 Förpackningsgrupp</b> · ADR, IMDG, IATA	Utgår
· <b>14.5 Miljöfaror:</b>	Ej användbar.
· <b>14.6 Särskilda skyddsåtgärder</b>	Ej användbar.
· <b>14.7 Bulktransport enligt bilaga II till Marpol 73/78 och IBC-koden</b>	Ej användbar.
· <b>UN "Model Regulation":</b>	Utgår

### AVSNITT 15: Gällande föreskrifter

- **15.1 Föreskrifter/lagstiftning om ämnet eller blandningen när det gäller säkerhet, hälsa och miljö**
- **Direktiv 2012/18/EU**
- **Namngivna farliga ämnen - BILAGA I** Inga beståndsdelar är listade.
- **Förordning (EG) nr 1907/2006 BILAGA XVII Villkor: 3**
- **15.2 Kemikaliesäkerhetsbedömning:** En kemikaliesäkerhetsbedömning har ej gjorts.

SE

(Fortsättning på sida 7)

**Säkerhetsdatablad**  
**enligt förordning (EG) nr. 1907/2006, Artikel 31**

Datum för utskrift: 10.04.2020

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**Handelsnamn: TECHNOVIT 8100 - LIQUID**

(Fortsättning från sida 6)

**AVSNITT 16: Annan information**

Uppgifterna är baserade på våra aktuella kunskaper. De representerar emellertid ingen som helst garanti beträffande produkttegenskaper och utgör ingen grund för ett avtalat rättsförhållande.

**· Relevanta fraser***H226 Brandfarlig vätska och ånga.**H312 Skadligt vid hudkontakt.**H315 Irriterar huden.**H317 Kan orsaka allergisk hudreaktion.**H319 Orsakar allvarlig ögonirritation.**H332 Skadligt vid inandning.***· Förkortningar och 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)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 3: Brandfarliga vätskor – Kategori 3**Acute Tox. 4: Akut toxicitet - dermal – Kategori 4**Skin Irrit. 2: Frätande eller irriterande på huden – Kategori 2**Eye Irrit. 2: Allvarlig ögonskada eller ögonirritation – Kategori 2**Skin Sens. 1: Hudsensibilisering – Kategori 1*