

According to directive 1907/2006/EC, 2020/878  
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Trade name: EC 251 PRIME

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

### 1.1 Product identification:

Product name: EC 251 PRIME  
UFI code: 21M2-4088-0000-H770

### 1.2 Relevant identified uses of the substance or mixture and uses advised against:

Type of application (Use): Casting resin  
Recommended restrictions on use: For industrial and professional use only.

### 1.3 Details of the supplier of the safety data sheet:

Responsible distributor : ASSYST bvba / A.S.O.W. bvba  
Hellegatstraat 13a  
2590 Berlaar  
Belgium  
Tel: +32 495 50 61 14 / +32 496 83 70 27  
Website: [www.assyst.org](http://www.assyst.org) / [www.artsuppliesonweb.com](http://www.artsuppliesonweb.com)  
Email: [ao@assyst.org](mailto:ao@assyst.org) / [vera.opsommer@assyst.org](mailto:vera.opsommer@assyst.org)

### 1.4 Emergency phone number:

For Belgium:

Call the **Poison Control Centre (070 245 245 - free)**, if not available: **02 264 96 30** (normal rate) or your doctor. In life-threatening situations, always call the European emergency number **112**.

NHS 24 Direct

For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery. **For urgent medical help**, use the NHS 111 online service, or **call 111** if you are unable to get help online. **For life-threatening emergencies, call 999** for an ambulance. There is more information about getting medical help on the NHS website.

## **SECTION 2: Hazard identification**

### 2.1 Classification of the substance or mixture:

**Classification according to directive (EC) No 1272/2008 and its amendments.**

The product is classified according to current legislation.

**Classification in accordance with Regulation (EC) No 1272/2008 as amended.**

#### **Health hazards**

Skin corrosion/irritation, Category 2 - H315: Causes skin irritation.

Eye irritation, Category 2 - H319: Causes severe eye irritation.

Skin sensitisation, Category 1 - H317: May cause an allergic skin reaction.

Carcinogenicity, Category 2 - H351: Suspected of causing cancer.

Reproductive toxicity, Category 1B - H360F: May impair fertility.

(Chronic) Aquatic long-term hazard, Category 2 - H411: Toxic to aquatic organisms with long-lasting effects.

### 2.2 Labelling elements:

**Labelling according to regulation (EC) No 1272/2008 [CLP/GHS]:**



**Hazard pictograms:**

**Signal word**

Danger.

**Hazardous ingredients to be declared on the label:**

- 4,4'-isopropylidenediphenol, polymer with 1-chloro-2,3-epoxypropane MW > 700
- 1,6-Hexamethylenediol diglycidyl ether
- 2-ethyl-2-[[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate
- bis-[4-(2,3-epoxypropoxy)phenyl]propane

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- oxirane, mono[(C12-14-alkyloxy)methyl] derivatives.
- Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

**Hazard statements:**

H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes severe eye irritation.  
H351 Suspected of causing cancer.  
H360F May impair fertility.  
H411 Toxic to aquatic organisms with long-lasting effects.

**Precautions****Prevention:**

P201 Before using, refer to the special instructions.  
P261 Avoid inhalation of dust/fume/gas/mist/vapour/spray.  
P273 Avoid discharge into the environment.  
P280 Wear protective gloves/eye protection/face protection.

**Action:**

P308 + P313 AFTER (possible) exposure: consult a doctor.  
P391 Clean up any leaks/spills.

**Additional labelling:**

EUH205 Contains epoxy compounds. May cause an allergic reaction.

**2.3 Other hazards:**

This substance/mixture does not contain any components that can be considered persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**Ecological information:**

The substance/mixture does not contain any components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

**Toxicological information:**

The substance/mixture does not contain any components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

**SECTION 3: Composition and information on ingredients****3.2 Mixtures:****Description:**

Chemical characterisation : Modified epoxy resin

Chemical Name	CAS No. EC No. Index no. Registration number	Classification (Regulation (EC) No 1272/008)	Concentration (%)
4,4'-Isopropylidendiphenol, Polymer - mit 1-Chloro-2,3-epoxypropan MW > 700	25068-38-6 - - -	Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 3; H412	>= 20 - < 25
1,6-Hexamethylenediol diglycidyl ether	933999-84-9 - - 01-2119463471-41	Skin Irrit.2; H315 Eye Irrit.2; H319 Skin Sens.1; H317 Repr. 1B; H360F Aquatic Chronic 3; H412	>= 20 - < 25
2-ethyl-2-[[[(1-oxoallyl)oxy]methyl]- 1,3-propanediyl diacrylate	15625-89-5 239-701-3 607-111-00-9 -	Skin Irrit.2; H315 Eye Irrit.2; H319 Skin Sens.1; H317 Carc. 2; H351 Aquatic Acute1; H400	>= 20 - < 25

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		Aquatic Chronic1; H410  M-factor (Acute aquatic toxicity): 1 M-factor (Chronic aquatic toxicity): 1	
bis-[4-(2,3-epoxypropoxy)phenyl]propane	1675-54-3 216-823-5 603-073-00-2 01-2119456619-26	Eye Irrit.2; H319 Skin Irrit.2; H315 Skin Sens.1; H317 Aquatic Chronic2; H411  <u>Specific concentration limits:</u> Eye Irrit. 2; H319 ≥ 5 % Skin Irrit. 2; H315 ≥ 5 %	≥ 12,5 - < 20
Oxirane, mono[(C10-16-alkyloxy)methyl] derivatives	68609-97-2 271-846-8 603-103-00-4 01-2119485289-22	Skin Irrit. 2; H315 Skin Sens. 1; H317 Repr. 1B; H360F	≥ 10 - < 12,5
Propylene carbonate	108-32-7 203-572-1 607-194-00-1 -	Eye Irrit.2; H319	≥ 7 - < 10
Silane, trimethoxy[3-(oxiranylethoxy)propyl].	2530-83-8 219-784-2 - 01-2119513212-58	Eye Dam.1; H318 Aquatic Chronic3; H412	≥ 1 - < 2,5
Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6,-pentamethyl-4-piperidyl sebacate	1065336-91-5 - - 01-2119491304-40	Skin Sens.1A; H317 Repr.2; H361f Aquatic Acute1; H400 Aquatic Chronic1; H410  M-factor (Acute aquatic toxicity): 1 M-factor (Chronic aquatic toxicity): 1	≥ 0,1 - < 0,25

For explanation of abbreviations, see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures:

#### General advice:

Keep warm and put in a quiet environment.  
Show this safety data sheet to the doctor on duty.  
Remove contaminated clothing immediately.

#### By inhalation:

Getting into the fresh air.  
Keep victim warm and calm.  
If unconscious, apply stable side position and seek medical attention.  
If symptoms persist, consult a doctor.  
In case of irregular breathing or respiratory arrest, apply artificial respiration.

#### On contact with skin:

Immediately wash with soap and plenty of water.  
DO NOT use solvents or paint thinner.  
In case of spillage on clothing, remove clothing.  
If skin irritation persists, consult a doctor.

#### On contact with eyes:

Rinse immediately with plenty of water, including under the eyelids, for at least 15 minutes.  
If eye irritation persists, consult a specialist.

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As far as easy to do, remove any contact lenses.

**If swallowed:**

Keep calm.

Do not induce vomiting without medical advice.

Keep breathing passages clear.

If symptoms persist, consult a doctor.

4.2 Main acute and delayed symptoms and effects:

**Symptoms:**

Irritant effects.

Redness.

Sensitising effects.

4.3 Indication of immediate medical attention and special treatment required:

**Treatment:**

The procedure for first aid should be drawn up together with the company doctor.

**SECTION 5: Fire-fighting measures**

5.1 Extinguishing media:

**Suitable extinguishing agents:**

Foam

Sand

Carbon dioxide (CO<sub>2</sub>)

Water mist

**Unsuitable extinguishing media:**

Water spray jet

5.2 Special hazards arising from the substance or mixture:

**Specific hazards in firefighting:**

Heat can increase pressure in sealed containers.

Cool closed containers near the fire with water spray.

5.3 Advice for firefighters:

**Special protective equipment for firefighters:**

In case of fire, wear a compressed air mask.

Use personal protective equipment.

**Further information:**

In case of fire and/or explosion, avoid breathing fumes.

Use extinguishing agents suitable for the local conditions and environment.

Immediately evacuate personnel to a safe area.

Prevent extinguishing water from contaminating surface water or groundwater systems.

Combustion residues and contaminated fire fighting water must be disposed of according to local regulations.

**SECTION 6: Measures in case of accidental release of the substance or mixture**

6.1 Personal precautions, protective equipment and emergency procedures:

**Personal precautions:**

See protective measures in sections 7 and 8.

Evacuate personnel to a safe area.

Use personal protective equipment.

Ensure adequate ventilation.

Inform the competent authority in case of gas leaks, or runoff into waterways, soil or sewers.

6.2 Environmental precautions:

**Environmental precautions:**

Avoid uncontrolled discharge of product into the environment.

Try to prevent the material from draining into sewers or watercourses.

In case of significant leaks that cannot be contained, the local government should be notified.

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### 6.3 Methods and materials for containment and cleaning:

#### **Cleaning methods:**

Absorb in inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Limit spill and collect with non-combustible absorbent materials, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).  
Incorporate and transfer into properly labelled containers.

### 6.4 Reference to other sections:

For personal protection, see section 8.

## **SECTION 7: Handling and storage:**

### 7.1 Precautions for safe handling of the substance or mixture:

#### **Safe handling advice:**

Ensure adequate ventilation and/or extraction in the workplace.  
Avoid inhalation, ingestion and contact with skin and eyes.  
Wear personal protective clothing.  
Persons suffering from skin sensitisation problems, asthma, allergies, chronic or recurrent respiratory diseases should not perform work involving the use of this mixture.

#### **Advice on protection against fire and explosion:**

Keep away from open flames, hot surfaces and ignition sources.

#### **Hygiene measures:**

Ensure adequate air ventilation.  
Wash hands and face before stopping work and immediately after using the product.

### 7.2 Conditions for safe storage, including incompatibilities:

#### **Requirements for storage areas and containers:**

Store containers tightly closed in a dry, cool and well-ventilated place.  
Store in correctly labelled containers.

#### **Advice for mixed storage:**

Keep away from oxidising agents, strong acids or alkaline materials and amines.  
Keep product and empty packaging away from heat and ignition sources.  
Keep away from food and drink.

#### **Other details:**

Stable at normal room temperature and pressure.

### 7.3 Specific end use:

#### **Specific use:**

Before using this substance/mixture, refer to the technical guidelines.

## **SECTION 8: Exposure controls/personal protection measures**

### 8.1 Control parameters:

The product contains no ingredients for which exposure values have been established.

#### **Derived no-effect doses (DNEL) according to Regulation (EC) Number 1907/2006:**

Substance name	End use	Route of exposure	Possible health condition	Value
1,6-Hexamethylenediol diglycidyl ether	Employees	Skin touch	Long-term -systemic effects	2.8 mg/kg
bis-[4-(2,3-epoxypropoxy)phenyl]propane	Employees	Inhalation	Long-term -systemic effects	4.9 mg/m <sup>3</sup>
	Employees	Skin touch	Acute - systemic effects, Long-term - systemic effects	8.33 mg/kg
	Employees	Inhalation	Acute - systemic effects, Long-term - systemic effects	12.25 mg/m <sup>3</sup>
	Consumers	Skin touch	Acute - systemic effects, Long-term - systemic effects	3,571 mg/kg
	Consumers	Ingestion	Acute - systemic effects, Long-term - systemic effects	0.75 mg/kg

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Oxirane, mono[(C10-16-alkyloxy)methyl]derivatives	Employees	Skin touch	Long-term - systemic effects	3.9 mg/kg
	Employees	Inhalation	Long-term - systemic effects	13.8 mg/m3
Silane, trimethoxy[3-(oxiranymethoxy)propyl].	Employees	Skin touch	Acute - systemic effects	21 mg/kg
		Inhalation	Acute - systemic effects	147 mg/m3
	Employees		Long-term - systemic effects	21 mg/kg
	Employees		Long-term - systemic effects	147 mg/m3

## Predicted no-effect concentration (PNEC) according to Regulation (EC) Number 1907/2006:

Substance name	Environmental compartment	Value
1,6-Hexamethylenediol diglycidyl ether	Sewage treatment plant	1 mg/l
	Freshwater	0.0115 mg/l
	Freshwater deposition	0.283 mg/kg
	Seawater	0.00115 mg/l
	Sea deposits	0.0283 mg/kg
bis-[4-(2,3-epoxypropoxy)phenyl]propane	Bottom	0.223 mg/kg
	Freshwater	0.006 mg/l
	Seawater	0.0006 mg/l
	Sporadic release	0.018 mg/l
	Sewage treatment plant	10 mg/l
Oxirane, mono[(C10-16-alkyloxy)methyl] derivatives	Freshwater deposition	0.996 mg/kg
	Sea deposits	0.0996 mg/kg
	Bottom	0.196 mg/kg
	Freshwater	0.0072 mg/l
	Freshwater deposition	66.77 mg/kg
Silane, trimethoxy[3-(oxiranymethoxy)propyl].	Sewage treatment plant	1 mg/l
	Seawater	0.00072 mg/l
	Sea deposits	6,677 mg/kg
	Bottom	80.12 mg/kg
	Sewage treatment plant	10 mg/l
Silane, trimethoxy[3-(oxiranymethoxy)propyl].	Freshwater	1 mg/l
	Seawater	0.1 mg/l
	Sporadic release	1 mg/l
	Freshwater deposition	0.79 mg/kg
	Bottom	0.13 mg/kg

## 8.2 Exposure control measures:

### Technical controls:

Effective extraction ventilation system.  
Effective ventilation at all workplaces.

### Personal protection devices:

#### Eye protection:

Do not wear contact lenses.  
Safety glasses with side shields according to EN 166.  
Provide eyewash facilities and safety showers close to the workplace.

#### Hand protection

##### Material:

Protective gloves according to EN 374.

Material: butyl rubber

Breakthrough time: > 480 min

Glove thickness: 0.35 mm

Material: Neoprene

Breakthrough time: > 480 min

Glove thickness: 0.35 mm

Material: Nitrile rubber

Breakthrough time: > 480 min

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Glove thickness: 0.35 mm

#### Notes:

In case of persistent or repeated contact, wear gloves.

Observe regulations on permeability and soak time, as supplied by the glove supplier. Also consider specific local conditions of use, such as risk of cuts, abrasion and contact time.

The soaking time depends on the material, thickness and glove type, among other things, and must therefore be determined separately for each application.

Suitability for a specific workplace should be discussed with the manufacturer of the protective gloves.

#### **Skin and body protection:**

Protective clothing

#### **Respiratory protection:**

Unless adequate local exhaust ventilation is provided, or exposure assessment shows that exposures are within recommended exposure guidelines, use respiratory protection.

In case of vapour formation, use a respirator with an approved filter type.

The equipment must comply with EN 14387.

Apply engineering measures to comply with occupational exposure limits.

This can be achieved by good general extraction or, where practical, local exhaust ventilation.

#### **Protective measures:**

Avoid contact with skin.

Wear suitable personal protective equipment.

## **SECTION 9: Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties:**

Occurrence:	liquid
Colour:	colourless
Smell:	light
Odour threshold:	Not performed
Melting/freezing point:	Not applicable
Boiling point/boiling range:	>200°C
Upper explosion limit:	Not applicable
Lower explosion limit:	Not applicable
Flash point:	100°C
Ignition temperature:	Not applicable
Auto-ignition temperature:	Not applicable
Decomposition temperature:	No data available
pH:	4 - 6 Concentration: 1 %
<b>Viscosity:</b>	
Viscosity, dynamic:	300 - 400 mPa.s (25 °C)
Viscosity, kinematic:	Not performed
<b>Solubility:</b>	
Solubility in water:	Not performed
Solubility in other solvents:	Not performed
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	Not performed
Density: 1.	12 g/cm <sup>3</sup> (25 °C)
Bulk specific gravity:	Not exported
Relative vapour density:	Not performed
<b>Particle characteristics:</b>	
Particle size:	Not applicable
<b><u>9.2 Other information</u></b>	
Explosives:	Not applicable

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Oxidising properties:	Not applicable
Self-ignition:	Not applicable
Evaporation rate:	Not performed
Surface tension:	Not performed
Sublimation point:	Not applicable

## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity:**

Stable under recommended storage conditions.

### **10.2 Chemical Stability:**

No decomposition if stored and applied as indicated.

### **10.3 Potential Hazardous Reactions:**

#### **Dangerous reactions:**

Reacts with the following substances:

Bases

Strong oxidising agents

Avoid amines.

### **10.4 Conditions to avoid:**

No decomposition if directions are followed.

### **10.5 Chemically interacting Materials:**

#### **Materials to avoid:**

Incompatible with oxidising agents.

### **10.6 Hazardous Decomposition Products:**

**The following substances may be released from this product:**

Carbon monoxide, carbon dioxide and unburned hydrocarbon (smoke).

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects:**

#### **Acute Toxicity**

Product:

#### **Acute oral toxicity:**

Comments: No data available

#### **Acute toxicity by inhalation:**

Comments: No data available

#### **Acute dermal toxicity:**

Comments: No data available

#### **Acute toxicity (other route of administration):**

Comments: No data available

#### **Constituents:**

##### **1,6-Hexamethylenediol diglycidyl ether:**

#### **Acute oral toxicity:**

LD50 (Rat): 2,900 mg/kg

Method: Guideline test OECD 401

GLP: yes

#### **Acute dermal toxicity:**

LD50 (Rabbit): > 2,000 mg/kg

Method: Guideline test OECD 402

GLP: yes

##### **bis-[4-(2,3-epoxypropoxy)phenyl]propane:**

#### **Acute oral toxicity:**

LD50 (Rat, female): > 2,000 mg/kg

Method: Guideline test OECD 420

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GLP: yes

**Acute dermal toxicity:**

LD50 (Rat, male and female): > 2,000 mg/kg

Method: Guideline test OECD 402

GLP: yes

Silane, trimethoxy[3-(oxiranylmethoxy)propyl]:

**Acute toxicity by inhalation:**

LC50 (Rat, male and female): > 5.3 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: Guideline test OECD 403

GLP: yes

**Acute dermal toxicity:**

LD50 (Rabbit, male): 4,250 mg/kg

Method: Guideline test OECD 402

**Skin corrosion/irritation**

Product:

Comments: No data available

Constituents:

bis-[4-(2,3-epoxypropoxy)phenyl]propane:

Species: Rabbit

Exposure time: 4 h

Method: Guideline test OECD 404

Result: skin irritation

GLP: yes

Silane, trimethoxy[3-(oxiranylmethoxy)propyl]:

Species: Rabbit

Method: Guideline test OECD 404

Result: no skin irritation

**Serious eye damage/eye irritation**

Product:

Comments: No data available

Constituents:

Silane, trimethoxy[3-(oxiranylmethoxy)propyl]:

Species: Rabbit

Method: Guideline test OECD 405

Result: Risk of serious eye damage.

**Respiratory/skin sensitisation**

Product:

Comments: No data available

Constituents:

1,6-Hexamethylenediol diglycidyl ether:

Test type: Mouse Local Lymph Node assay (LLNA)

Route of exposure: Skin

Type: Mouse

Method: Guideline test OECD 429

Result: May cause sensitisation by skin contact.

GLP: yes

bis-[4-(2,3-epoxypropoxy)phenyl]propane:

Test type: Mouse Local Lymph Node assay (LLNA)

Type: Mouse

Method: Guideline test OECD 429

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Result: May cause sensitisation by skin contact.

GLP: yes

Silane, trimethoxy[3-(oxiranylmethoxy)propyl]:

Test type: Buehler test

Species: Guinea pig

Method: Guideline test OECD 406

Result: Does not cause skin hypersensitivity.

GLP: yes

### **Carcinogenicity**

Product:

Comments: No data **available**

### **Reproductive toxicity**

Product:

Effects on fertility:

Comments: No data available

Effects on foetal development:

Comments: No data available

### **STOT from single exposure**

Product:

Notes: Not applicable

### **STOT on repeated exposure**

Product:

Notes: Not applicable

### **Repeated-dose toxicity**

Product:

Comments: No data available

### **Aspiration toxicity**

Constituents:

bis-[4-(2,3-epoxypropoxy)phenyl]propane:

No classification for aspiration toxicity.

### 11.2 Information on other hazards

### **Endocrine-disrupting properties**

Product:

Assessment : The substance/mixture does not contain any components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

### **Further information**

Product:

Remarks : No data available

## **SECTION 12: Ecological information**

### 12.1 Toxicity:

Product:

#### **Toxicity to fish:**

Comments: No data available

#### **Toxicity to daphnia and other aquatic invertebrates:**

Comments: No data available

Constituents:

1,6-Hexamethylenediol diglycidyl ether:

#### **Toxicity to fish:**

LC50 (Oncorhynchus mykiss (rainbow trout)): 30 mg/l

Exposure time: 96 h

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Test type: semi-static test

Method: Guideline test OECD 203

GLP: yes

**Toxicity to daphnia and other aquatic invertebrates:**

EC50 (Daphnia magna (large water flea)): 39 mg/l

Exposure time: 48 h

Test type: static test

Method: OECD Test Guideline 202

GLP: yes

2,2-bis(acryloyloxymethyl)butyl acrylate:

**M-factor (Acute Aquatic Toxicity):**

1

**M-factor (Chronic Aquatic Toxicity):**

1

bis-[4-(2,3-epoxypropoxy)phenyl]propane:

**Toxicity to daphnia and other aquatic invertebrates:**

EC50 (Daphnia (Aquatic fly)): 1.7 mg/l

Exposure time: 48 h

Test type: static test

Method: OECD Test Guideline 202

GLP: yes

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):**

NOEC: 0.3 mg/l

Exposure time: 21 d

Species: Daphnia magna (large water flea)

Test type: semi-static test

Method: OECD Test Guideline 211

GLP: yes

**Toxicity to daphnia and other aquatic invertebrates:**

EC50 (Daphnia magna (large water flea)): 7.2 mg/l

Exposure time: 48 h

Test type: static test

Method: OECD Test Guideline 202

GLP: yes

Silane, trimethoxy[3-(oxiranylmethoxy)propyl]:

**Toxicity to fish:**

LC50 (Cyprinus carpio (Carp)): 55 mg/l

Exposure time: 96 h

Test type: semi-static test

Method: Directive 67/548/EEC, Annex V, C.1.

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):**

NOEC: > 100 mg/l

Exposure time: 21 d

Species: Daphnia magna (large water flea)

Test type: semi-static test

Method: OECD Test Guideline 211

GLP: yes

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate and methyl 1,2,2,6,6,-pentamethyl-4-piperidyl sebacate:

M-factor ((Acute) Aquatic short-term hazard):

1

M-factor ((Chronic) Aquatic long-term hazard):

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## 12.2 Persistence and Degradability:

Product:

### **Biodegradability:**

Comments: No data available

### **Physicochemical removability:**

Comments: No data available

Constituents:

#### 1,6-Hexamethylenediol diglycidyl ether:

### **Biodegradability:**

Test type: aerobic

Result: Intrinsically biodegradable.

Method: Guideline test OECD 301D

GLP: yes

#### bis-[4-(2,3-epoxypropoxy)phenyl]propane:

### **Biodegradability:**

Result: Not readily biodegradable.

### **Physicochemical removability:**

Comments: No data available

Constituents:

#### Silane, trimethoxy[3-(oxiranymethoxy)propyl]:

### **Biodegradability:**

Test type: aerobic

Result: Not readily biodegradable.

Method: Directive 67/548/EEC, Annex V, C.4.A.

GLP: yes

## 12.3 Bioaccumulation:

Product:

### **Bioaccumulation:**

Comments: No data available

Constituents:

#### 1,6-Hexamethylenediol diglycidyl ether:

### **Partition coefficient: n-octanol/water:**

log Pow: 0,822 (20 °C)

pH: 6 - 8

Method: Guideline test OECD 107

GLP: yes

#### bis-[4-(2,3-epoxypropoxy)phenyl]propane:

### **Partition coefficient: n-octanol/water:**

log Pow: 3,242 (25 °C)

pH: 7.1

Method: OECD Test Guideline 117

GLP: yes

## 12.4 Mobility in soil:

Constituents:

#### 1,6-Hexamethylenediol diglycidyl ether:

### **Distribution within and between environmental compartments:**

log Koc: 2,98

Method: Guideline test OECD 121

## 12.5 Results of PBT and vPvB assessment:

Product:

Assessment:

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This substance/mixture does not contain any components that can be considered persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain any components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

#### 12.7 Other Harmful Effects:

Product:

#### **Additional ecological information:**

Remarks: There is a risk of environmental damage if this substance is handled or disposed of improperly.

### **SECTION 13: Disposal instructions**

#### 13.1 Waste treatment methods:

**Product:**

According to local and national regulations.  
Container dangerous when empty.  
Do not dispose together with household waste.  
Do not mix streams during waste collection.

#### **Contaminated packaging:**

Empty containers should be disposed of at an authorised waste treatment facility for reuse or disposal.

### **SECTION 14: Information relating to transport**

#### 14.1 UN number

ADR/RID/ADN:	UN 3082
IMDG:	UN 3082
IATA:	UN 3082

#### 14.2 Proper cargo name according to UN model regulations

ADR/RID/ADN:	ENVIRONMENTALLY HAZARDOUS LIQUID, N.O.S. (trimethylolpropane triacrylate)
IMDG:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trimethylolpropane triacrylate)
IATA:	Environmentally hazardous substance, liquid, n.o.s. (trimethylolpropane triacrylate)

#### 14.3 Transport hazard class(es)

ADR/RID/ADN:	9
IMDG:	9
IATA:	9

#### 14.4 Packing group

##### **ADR/RID/ADN**

Packing group:	III
Classification code:	M6
Hazard identification number:	90
Labels:	9
Tunnel restriction code:	-

Notes:

ADR: These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

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Packing group: III  
Labels: 9  
EmS Code: F-A, S-F  
Notes: IMDG Code segregation group - none  
IMDG: Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provisions of this Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class all provisions of this Code relevant to any additional hazards continue to apply.  
IMDG Code segregation group - none

## IATA (Cargo)

Packing requirement (cargo aircraft): 964  
Packing group: III  
Labels: Miscellaneous  
Notes: IATA: These substances when transported in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other provisions of these Regulations provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

## IATA (Passenger)

Packing requirement (passenger aircraft): 964  
Packaging instruction (LQ) : Y964  
Packing group: III  
Labels: Miscellaneous

## 14.5 Environmental hazards

### ADR/RID/AND

Environmental hazard: yes

### IMDG

Marine pollution: yes

### IATA

Environmentally hazardous: yes

## 14.6 Special precautions for the user

### Notes:

The transport of dangerous goods, including loading and unloading, must be carried out in accordance with regulations by personnel who have received the necessary training.  
The transport classification(s) given herein are for information only, and based solely on the properties of the unpackaged material as described in this safety data sheet.  
Transport classifications may vary in terms of mode of transport, packaging size and variations in regional or national regulations.

## 14.7 Transport in bulk in accordance with Annex II to MARPOL 73/78 and the IBC Code

Not applicable for product, as delivered.

## **SECTION 15: Statutory information**

### 15.1 Safety, health and environmental regulations and legislation specific to the substance or mixture:

**REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) :**

Restriction conditions for the following dates should be considered:

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Number on the list: 3

**REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)**

**REACH - Candidate list of substances of very high concern for authorisation (Article 59):**

Not applicable

**Regulation (EC) No 1005/2009 on ozone-depleting substances:**

Not applicable

**Regulation (EE) 2019/1021 on persistent organic pollutants (recast):**

Not applicable

**Regulation (EC) No 649/2012 of the European Parliament and of the Council concerning the export and import of dangerous chemicals:**

Not applicable

**REACH - List of substances subject to authorisation (Annex XIV):**

Not applicable

**REGULATION (EU) 2019/1148 on the marketing and use of explosives precursors:**

Not applicable

**Overviews of toxic chemicals and precursor (intermediate) compounds of the International Convention on Chemical Weapons ("International Chemical Weapons Convention (CWC)"):**

Not applicable

**Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors:**

Not applicable

**Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.**

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**Other regulations:**

As for the composition of the product, we deliberately do not add any of the substances indicated in European Directive 2011/65/EU (RoHS 2, RoHS3 and China RoHS).

The product therefore complies with the said guidelines.

Also, no conflict minerals are deliberately added to the product.

15.2 Chemical safety assessment:

Not applicable.

## **SECTION 16: Other information**

Items in which relevant changes have been made from the previous version are marked in the main body of this document with a vertical line.

### **Full text of the H statements**

H315:	Causes skin irritation.
H317:	May cause an allergic skin reaction.
H318:	Causes serious eye damage.
H319:	Causes severe eye irritation.
H351:	Suspected of causing cancer.
H360F:	May impair fertility.
H361f:	Suspected of damaging fertility.
H400:	Very toxic to aquatic organisms.
H410:	Very toxic to aquatic organisms, with long-lasting effects.
H411:	Toxic to aquatic organisms with long-lasting effects.
H412:	Harmful to aquatic life with long-lasting effects.

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## Full text of other abbreviations

Aquatic Acute:	(Acute) Aquatic short-term hazard
Aquatic Chronic:	(Chronic) Aquatic long-term hazard
Carc:	Carcinogenicity
Eye Dam.:	Serious eye damage
Eye Irrit.:	Eye irritation
Repr.:	Toxicity for reproduction
Skin Irrit.:	Skin corrosion/irritation
Skin	sensitisation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road (ADR Agreement); AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Association for the Testing of Materials; bw - Body Weight; CLP - Regulation on Classification, Labelling and Packaging; Regulation (EC) No 1272/2008; CMR - Carcinogenic, mutagenic or toxic to reproduction; DIN - Standard of the German Institute for Standardisation; DSL - List of substances used indoors (Canada); ECHA - European Chemicals Agency; EC-Number - EINECS number; ECx - Concentration associated with x% response; ELx - Charge capacity associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemicals (Japan); ErCx - Concentration associated with x% growth response; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - IMO International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk; IC50 - Half-Maximum Inhibitory Concentration; ICAO - International Civil Aviation Organisation; IECSC - Inventory List of Existing Chemicals in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korean Inventory of Existing Chemicals; LC50 - Lethal concentration for 50% of a test population; LD50 - Lethal dose for 50% of a test population (lethal dose median); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not otherwise specified; NO(A)EC - No discernible (negative) effect on concentration; NO(A)EL - No discernible (negative) effect on Level; NOELR - No discernible effect on cargo capacity; NZIoC - New Zealand inventory of chemicals; OECD - Organisation for Economic Co-operation and Development OECD; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, bioaccumulative and toxic substance; PICCS - Philippine inventory of chemicals and chemical substances; (Q)SAR - (Quantitative) structure-activity relationships; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH); RID - Regulations concerning the International Carriage of Dangerous Goods by Rail (RID); SADT - Self-accelerating decomposition temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwanese Inventory of Chemical Substances; TECL - Inventory of Chemicals Existing in Thailand; TRGS - Technical Regulation on Hazardous Substances; TSCA - Toxic Substances Control Act (USA); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative.

## Further information

Training advice:

Provide proper information, instruction and training for users.

## Sources of basic information used to compile the safety data sheet:

Information taken from reference works and literature.

See the list above.

## Classification of the preparation:

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
Carc. 2	H351

## Classification procedure:

Calculation method
Calculation method
Calculation method
Calculation method

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Repr. 1B	H360F	Calculation method
Aquatic Chronic 2	H411	Calculation method

The information in this safety data sheet is correct to the best of our knowledge at the date of issue indicated. This information is intended solely as guidance for safe handling, use, processing, storage, transportation, disposal, and release, and should not be considered a guarantee or indication of quality.