



**Safety Data Sheet**  
**according to Regulation (EC) No. 1907/2006 (REACH)**  
**according to Regulation (EU) 2020/878**

227-087-001  
 Version 3.0

ESH 08 (dif. colors)  
 Revision date 6 Dec 2025

Print date 8 Apr 2026

\* **Hazard components for labelling**

bis-[4-(2,3-epoxipropoxy)phenyl]propane  
 Bisphenol-F-epichlorohydrin resins  
 Solvent naphtha (petroleum), light arom.  
 maleic anhydride  
 oxirane, mono[(C12-14-alkyloxy)methyl] derivs.  
 polymer  
 Polypropylene glycol diglycidyl ether

**Supplemental hazard information**

EUH205 Contains epoxy constituents. May produce an allergic reaction.

**Other labelling**

Restricted to professional users.

**2.3 Other hazards**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**SECTION 3: Composition/information on ingredients.**

**3.2 Mixtures**

**Description**

Coating based on epoxy resin, component I

**Hazardous ingredients**

CAS No. EC No. Index No.	Substance name REACH No. Classification according to Regulation (EC) No 1272/2008 [CLP]	% [mass]
* 1675-54-3 216-823-5 603-073-00-2	<b>bis-[4-(2,3-epoxipropoxy)phenyl]propane</b> 01-2119456619-26 Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Eye Irrit. 2 H319 Specific concentration limit (SCL) Eye Irrit. 2 H319: >= 5,00 / Skin Irrit. 2 H315: >= 5,00	20,0 < 25,0
* 9003-36-5 500-006-8 -	<b>Bisphenol-F-epichlorohydrin resins</b> 01-2119454392-40 Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Aquatic Chronic 2 H411 ATE (dermal): > 2,000 mg/kg ATE (oral): > 10,000 mg/kg	8,00 < 10,0
* 68609-97-2 271-846-8 603-103-00-4	<b>oxirane, mono[(C12-14-alkyloxy)methyl] derivs.</b> 01-2119485289-22 Skin Irrit. 2 H315 / Skin Sens. 1 H317	5,00 < 7,00
* 7779-90-0 231-944-3 030-011-00-6	<b>trizinc bis(orthophosphate)</b> 01-2119485044-40 Aquatic Acute 1 H400 / Aquatic Chronic 1 H410 ATE (oral): > 5,000 mg/kg ATE (inhalative): > 5.7 mg/L (4 h)	3,00 < 5,00
* 26142-30-3 - -	<b>Polypropylene glycol diglycidyl ether</b> Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Eye Irrit. 2 H319 ATE (oral): > 4,000 mg/kg ATE (dermal): > 2,000 mg/kg	3,00 < 5,00
* 1314-13-2 215-222-5 030-013-00-7	<b>zinc oxide</b> 01-2119463881-32 Aquatic Acute 1 H400 (M = 1,00) / Aquatic Chronic 1 H410 (M = 1,00) ATE (oral): = 7,950 mg/kg ATE (oral): > 15,000 mg/kg ATE (inhalative): > 5.7 mg/L (4 h)	1,00 < 2,00
* 222716-38-3 - -	<b>polymer</b> Acute Tox. 4 H302 / Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Eye Irrit. 2 H319 / STOT RE 2 H373 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	0,200 < 0,250
* 64742-95-6 265-199-0 649-356-00-4	<b>Solvent naphtha (petroleum), light arom.</b> 01-2119455851-35 Asp. Tox. 1 H304 / Muta. 1B H340 / Carc. 1B H350	0,150 < 0,200

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	ATE (dermal): > 3,160 mg/kg ATE (oral): = 3,592 mg/kg ATE (inhalative): > 6.193 mg/L (4 h)	
* 108-31-6 203-571-6 607-096-00-9	<b>maleic anhydride</b> 01-2119472428-31 Acute Tox. 4 H302 / Skin Corr. 1B H314 / Skin Sens. 1A H317 / Eye Dam. 1 H318 / Resp. Sens. 1 H334 / STOT RE 1 H372 / EUH071 Specific concentration limit (SCL) Skin Sens. 1A H317: >= 0,001 ATE (oral): = 1,090 mg/kg	< 0,025

**Remark**

Full text of H- and EUH-statements: see section 16.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

**General information**

In all cases of doubt, or when symptoms persist, seek medical advice. If unconscious but breathing normally, place in recovery position and seek medical advice.

**Following inhalation**

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

**Following skin contact**

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners. Wash contaminated clothing before reuse.

**After eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

**Following ingestion**

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

**Self-protection of the first aider**

First aider: Pay attention to self-protection!

**4.2 Most important symptoms and effects, both acute and delayed**

**Symptoms**

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

alcohol resistant foam, Carbon dioxide (CO<sub>2</sub>), Powder, spray mist, (water)

**Unsuitable extinguishing media**

Strong water jet

**5.2 Special hazards arising from the substance or mixture**

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

**Hazardous combustion products**

Hazardous combustion products: Carbon dioxide (CO<sub>2</sub>), Carbon monoxide, smoke, Nitrogen oxides (NO<sub>x</sub>).

**5.3 Advice for firefighters**

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

**SECTION 6: Accidental release measures**

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

Remove all sources of ignition. Ventilate affected area. Do not breathe vapours.

**6.2 Environmental precautions**

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

**6.3 Methods and material for containment and cleaning up**

**For containment**

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

**For cleaning up**

Clean using cleansing agents. Do not use solvents.

**6.4 Reference to other sections**

Safe handling: see section 7  
 Personal protection equipment: refer to section 8  
 Disposal: see section 13

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

**Advices on safe handling**

- \* Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities.  
 Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. Personal protection equipment: see section 8.  
 Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

**Additional information**

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

**Advices on general occupational hygiene**

When using do not eat, drink or smoke.

**7.2 Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrsiVO). Access only for authorised persons. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRGS 727)".

**Hints on joint storage**

Keep away from strongly acidic and alkaline materials as well as oxidizers.

**Storage class**

LGK6.1D - Non-combustible substances of acute toxicity, category 3 / hazardous substances that are toxic or produce chronic effects

**Further information on storage conditions**

Take care of instructions on label. Protect from heat and direct sunlight. Smoking is forbidden. Remove all sources of ignition. Keep container tightly closed. Store carefully closed containers upright to prevent any leaks.

**7.3 Specific end use(s)**

Observe technical data sheet.

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

**8.1 Control parameters**

**Occupational exposure limit values**

CAS No.	Substance name	Source	Long-term /short-term (Spitzenbegrenzung)	
*	1317-65-3	Limestone	WEL	10 / - ( - ) mg/m <sup>3</sup> (inhalable fraction)
*	1317-65-3	Limestone	WEL	4 / - ( - ) mg/m <sup>3</sup> (respirable fraction)

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*	64742-95-6	Solvent naphtha (petroleum), light arom.	WEL	500 / - (-) mg/m <sup>3</sup> (hydrocarbons, aromatic)
*	14807-96-6	Talc (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> )	WEL	1 / - (-) mg/m <sup>3</sup> (respirable fraction)
	108-31-6	maleic anhydride	WEL	1 / 3 (-) mg/m <sup>3</sup>
*	13463-67-7	titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	WEL	4 / - (-) mg/m <sup>3</sup> (respirable fraction)
*	13463-67-7	titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	WEL	10 / - (-) mg/m <sup>3</sup> (inhalable fraction)

**Additional information**

Long-term: Long-term occupational exposure limit value  
short-term: short-term occupational exposure limit value

**Biological limit values**

No data available

**DNEL worker**

CAS No.	Substance name	DNEL type	DNEL value
9003-36-5	Bisphenol-F-epichlorohydrin resins	DNEL acute dermal, short-term (local)	8.33 mg/kg
9003-36-5	Bisphenol-F-epichlorohydrin resins	DNEL long-term dermal (systemic)	104.15 mg/kg
9003-36-5	Bisphenol-F-epichlorohydrin resins	DNEL long-term inhalative (systemic)	29.39 mg/m <sup>3</sup>
64742-95-6	Solvent naphtha (petroleum), light arom.	DNEL long-term dermal (systemic)	25 mg/kg
64742-95-6	Solvent naphtha (petroleum), light arom.	DNEL long-term inhalative (systemic)	150 mg/m <sup>3</sup>
108-31-6	maleic anhydride	DNEL long-term dermal (systemic)	0.04 mg/kg
108-31-6	maleic anhydride	DNEL long-term inhalative (systemic)	0.4 mg/m <sup>3</sup>
108-31-6	maleic anhydride	DNEL acute inhalative (systemic)	0.8 mg/m <sup>3</sup>
7779-90-0	trizinc bis(orthophosphate)	DNEL long-term dermal (systemic)	83 mg/kg
7779-90-0	trizinc bis(orthophosphate)	DNEL long-term inhalative (systemic)	5 mg/m <sup>3</sup>
1314-13-2	zinc oxide	DNEL long-term dermal (systemic)	83 mg/kg
1314-13-2	zinc oxide	DNEL long-term inhalative (systemic)	5 mg/m <sup>3</sup>

**DNEL Consumer**

CAS No.	Substance name	DNEL type	DNEL value
64742-95-6	Solvent naphtha (petroleum), light arom.	DNEL long-term dermal (systemic)	25 mg/kg
64742-95-6	Solvent naphtha (petroleum), light arom.	DNEL long-term inhalative (systemic)	150 mg/m <sup>3</sup>

**PNEC**

CAS No.	Substance name	PNEC type	PNEC Value
9003-36-5	Bisphenol-F-epichlorohydrin resins	PNEC aquatic, intermittent release	0.025 mg/L
9003-36-5	Bisphenol-F-epichlorohydrin resins	PNEC sediment, marine water	0.029 mg/kg
9003-36-5	Bisphenol-F-epichlorohydrin resins	PNEC sediment, freshwater	0.294 mg/kg
9003-36-5	Bisphenol-F-epichlorohydrin resins	PNEC aquatic, freshwater	0.003 mg/L

9003-36-5	Bisphenol-F-epichlorohydrin resins	PNEC aquatic, marine water	0 mg/L
64742-95-6	Solvent naphtha (petroleum), light arom.	PNEC aquatic, freshwater	0.012 mg/L
108-31-6	maleic anhydride	PNEC aquatic, intermittent release	0.428 mg/L
108-31-6	maleic anhydride	PNEC sewage treatment plant (STP)	44.6 mg/L
108-31-6	maleic anhydride	PNEC sediment, marine water	0.033 mg/kg
108-31-6	maleic anhydride	PNEC sediment, freshwater	0.334 mg/kg
108-31-6	maleic anhydride	PNEC aquatic, freshwater	0.043 mg/L
108-31-6	maleic anhydride	PNEC aquatic, marine water	0.004 mg/L
108-31-6	maleic anhydride	PNEC soil, freshwater	0.042 mg/kg
7779-90-0	trizinc bis(orthophosphate)	PNEC sewage treatment plant (STP)	100 mg/L
7779-90-0	trizinc bis(orthophosphate)	PNEC sediment, marine water	56.5 mg/kg
7779-90-0	trizinc bis(orthophosphate)	PNEC sediment, freshwater	117.8 mg/kg
7779-90-0	trizinc bis(orthophosphate)	PNEC aquatic, freshwater	20.6 mg/L
7779-90-0	trizinc bis(orthophosphate)	PNEC aquatic, marine water	6.1 mg/L
7779-90-0	trizinc bis(orthophosphate)	PNEC soil, freshwater	35.6 mg/kg

## 8.2 Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

### Personal protection equipment

#### Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

#### Hand protection

For prolonged or repeated handling the following glove material must be used:

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material  $\geq$  0.4 mm

Breakthrough time  $\geq$  480 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin.

Recommended glove articles: EN ISO 374

#### Skin protection

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

#### Eye/face protection

Eye glasses with side protection: EN 166

#### Body protection

When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. Anti-static clothing including shoes are recommended.

#### Remark

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

#### Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	grey
Odour	characteristic
pH at 20 °C	not determined

Melting point/freezing point	800 °C Source: titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]
Initial boiling point and boiling range	200 °C Source: Polypropylene glycol diglycidyl ether
Flash point	not applicable
flammability	not applicable
Lower explosion limit at 20°C	not determined
Upper explosion limit at 20°C	not determined
Vapour pressure at 20°C	1.489 mbar
Relative vapour density	not applicable
Density at 20 °C	1.8 kg/l
Water solubility at 20°C	partially soluble
Partition coefficient: n-octanol/water	see section 12
Auto-ignition temperature	300 °C Source: Polypropylene glycol diglycidyl ether
Decomposition temperature	not determined
Kinematic viscosity at 20 °C	1350-1850 mPas
Dynamic viscosity at 20 °C	1350-1850 mPas
Viscosity	> 999s / 6mm
particle characteristics	not applicable

## 9.2 Other information

Solid content	99.6 %
solvent content	0.4 %
Water content	0 %

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

### 10.3 Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

### 10.4 Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

### 10.5 Incompatible materials

No further relevant information available.

### 10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Based on available data, the classification criteria are not met.

#### \* Bisphenol-F-epichlorohydrin resins

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

LD50: oral (Rat): > 10,000 mg/kg

- \* **Polypropylene glycol diglycidyl ether**  
LD50: oral (Rat): > 4,000 mg/kg  
LD50: dermal (Rat): > 2,000 mg/kg
  - \* **Solvent naphtha (petroleum), light arom.**  
LD50: dermal (Rabbit): > 3,160 mg/kg; (OECD 402)  
LD50: oral (Rat): = 3,592 mg/kg; (OECD 401)  
LC50: inhalative (Rat): > 6.193 mg/L (4 h); (OECD 403)
  - \* **maleic anhydride**  
LD50: oral (Rat): = 1,090 mg/kg; (OECD 401)
  - \* **trizinc bis(orthophosphate)**  
LD50: oral (Rat): > 5,000 mg/kg  
LC50: inhalative (Rat): > 5.7 mg/L (4 h)
  - \* **zinc oxide**  
LD50: oral (Mouse): = 7,950 mg/kg  
LD50: oral (Rat): > 15,000 mg/kg  
LC50: inhalative (Rat): > 5.7 mg/L (4 h)
- Skin corrosion/irritation**  
Causes skin irritation.
- Serious eye damage/eye irritation**  
Causes serious eye irritation.
- Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- Overall assessment on CMR properties**  
May cause genetic defects.  
May cause cancer.
- 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.
- Practical experience/human evidence**  
Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: Headache, Dizziness, fatigue, amyosthenia, Dizziness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

## 11.2 Information on other hazards

### Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxic to aquatic life with long lasting effects.

#### *Algae toxicity*

- \* **Bisphenol-F-epichlorohydrin resins**

ErC50: > 1 mg/L (72 h)

#### **Solvent naphtha (petroleum), light arom.**

- \* ErC50: (*Pseudokirchneriella subcapitata*): = 2.6 mg/L (72 h)  
Method: OECD 201

- ErC50: (*Pseudokirchneriella subcapitata*): = 2.9 mg/L (72 h)
- \* **trizinc bis(orthophosphate)**  
ErC50: > 100 mg/L
  - \* **zinc oxide**  
ErC50: (*Scenedesmus subspicatus*): = 58.8 mg/L (72 h)
  - \* **Daphnia toxicity**
  - \* **Bisphenol-F-epichlorohydrin resins**  
EC50 = 2.55 mg/L (48 h)
  - \* **Polypropylene glycol diglycidyl ether**  
EC50 (*Daphnia magna* (Big water flea)): > 1 mg/L (48 h)
  - \* **Solvent naphtha (petroleum), light arom.**  
EC50 (*Daphnia magna* (Big water flea)): = 3.2 mg/L (48 h)  
Method: OECD 202
  - \* **maleic anhydride**  
EC50 = 42.81 mg/L (48 h)  
Method: OECD 202
  - \* **trizinc bis(orthophosphate)**  
EC50 (*Daphnia magna* (Big water flea)): > 1,000 mg/L (48 h)
  - \* **zinc oxide**  
EC50 (*Daphnia magna* (Big water flea)): > 100 mg/L (48 h)
  - \* **Fish toxicity**
  - \* **Bisphenol-F-epichlorohydrin resins**  
LC50: = 2.54 mg/L (96 h)
  - \* **Solvent naphtha (petroleum), light arom.**  
LC50: (*Oncorhynchus mykiss* (Rainbow trout)): = 9.22 mg/L (96 h)  
Method: OECD 203
  - \* LC50: (*Oncorhynchus mykiss* (Rainbow trout)): = 9.22 mg/L (96 h)  
Method: OECD 203
  - \* **trizinc bis(orthophosphate)**  
LC50: (*Oncorhynchus mykiss* (Rainbow trout)): > 1,000 mg/L (96 h)  
LC50: > 5,000 mg/L (96 h)
  - \* **zinc oxide**  
LC50: (*Danio rerio* (zebrafish)): > 10,000 mg/L (96 h)

## 12.2 Persistence and degradability

No information available.

## 12.3 Bioaccumulative potential

No information available.

## 12.4 Mobility in soil

No information available.

## 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

## 12.7 Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product/Packaging disposal

Do not empty into drains; dispose of this material and its container in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

#### Waste codes/waste designations according to EWC/AVV

080111\* - Waste paint and varnish containing organic solvents or other dangerous substances  
\* Hazardous waste according to Directive 2008/98/EC (waste framework directive).

**Other disposal recommendations**

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

## SECTION 14: Transport information

### 14.1 UN number or ID number

UN 3082

### 14.2 UN proper shipping name

**Land transport (ADR/RID)**

Environmentally hazardous substance, liquid, n.o.s. (trizinc bis(orthophosphate), zinc oxide)

**Sea transport (IMDG)**

Environmentally hazardous substance, liquid, n.o.s. (contains trizinc bis(orthophosphate), zinc oxide)

**Air transport (ICAO-TI / IATA-DGR)**

Environmentally hazardous substance, liquid, n.o.s. (contains trizinc bis(orthophosphate), zinc oxide)

### 14.3 Transport hazard class(es)

Land transport (ADR/RID)	9
Sea transport (IMDG)	9
Air transport (ICAO-TI / IATA-DGR)	9

### 14.4 Packing group

Land transport (ADR/RID)	III
Sea transport (IMDG)	III
Air transport (ICAO-TI / IATA-DGR)	III

### 14.5 Environmental hazards

Land transport (ADR/RID)	ENVIRONMENTALLY HAZARDOUS
Sea transport (IMDG)	Marine pollutant / trizinc bis(orthophosphate)

### 14.6 Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

### 14.7 Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

### 14.8 Additional information

**Land transport (ADR/RID)**

Tunnel restriction code: -  
Limited quantity (LQ): 5 ltr  
Hazard identification number (Kemler No.): 90

**Sea transport (IMDG)**

EmS-No.: F-A S-F  
Limited quantity (LQ): 5 ltr

**Air transport (ICAO-TI / IATA-DGR)**

Limited quantity (LQ): 30 Liter  
in packages <= 5 litres: unadapted

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**EU legislation**

**Authorisations and/or restrictions on use**

**Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions)**

Use restriction according to REACH annex XVII, no.: 03, 40

**Restrictions of occupation**

Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable.

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

**Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]**

VOC value: 7 g/l

**Directive 2004/42/EC on the limitation of emissions of volatile organic compounds**

VOC limit value: 2004/42/IIA(j): 500 g/l (2010)

Maximum VOC content of the product in a ready to use condition: 6 g/L

This product meets the requirements of Regulation (EC) No. 1935/2004 on the limitation of VOC content.

**Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]**

**Hazard categories / Named dangerous substances**

E2 Hazardous to the aquatic environment in Category Chronic 2

Quantity 1: 200t; Quantity 2: 500t

**National regulations**

Observe in addition any national regulations!

**Water hazard class**

**15.2 Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

**List of relevant hazard statements and/or precautionary statements from sections 2 to 15**

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H340	May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H350	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H372	Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H373	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

**Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]**

Skin Irrit. 2	Calculation method.
Skin Sens. 1	Calculation method.
Eye Irrit. 2	Calculation method.
Muta. 1B	Calculation method.
Carc. 1B	Calculation method.
Aquatic Chronic 2	Calculation method.

**Key literature references and sources for data**

Data arise from reference works and literature.

**Abbreviations and acronyms**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

OEL: Occupational Exposure Limit Value

BLV: Biological limit values

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging

CMR: Carcinogenic, Mutagenic and Reprotoxic

DIN: German Institute for Standardization / German industrial standard

**Safety Data Sheet**  
**according to Regulation (EC) No. 1907/2006 (REACH)**  
**according to Regulation (EU) 2020/878**



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DNEL: Derived No-Effect Level  
EAKV: European Waste Catalogue Directive  
EC: Effective Concentration  
EC: European Community  
EN: European Standard  
EU/EEA: European Economic Area  
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations  
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
ICAO-TI: International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air  
IMDG Code: International Maritime Code for Dangerous Goods  
ISO: International Organization for Standardization  
LC: Lethal Concentration  
LD: Lethal Dose  
:  
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships  
OECD: Organisation for Economic Cooperation and Development  
PBT: persistent, bioaccumulative, toxic  
PNEC: Predicted No Effect Concentration  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail  
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals  
UN: United Nations  
VOC: Volatile Organic Compounds  
vPvB: very persistent and very bioaccumulative

**Indication of changes**

\* Data changed compared with the previous version.  
replaces version: 2.0  
replaces revision of: 1 Dec 2025