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

1.1 Product identifier

Trade name/designation

247-182-007 ESD 182 K-DB (dif. colors)
CHING-EP-HIGH-SOLID-PRIMER
COMPONENT I 80-100 µm

UFI: P1U8-X1NK-6001-AN0N

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

Relevant identified uses

Corrosion Protection and Industrial Coatings.

1.3 Details of the supplier of the safety data sheet

Supplier

CHEMISCHE INDUSTRIE ERLANGEN GMBH
Rathenaustr. 18 Telephone: +49 9131 3006-0
91052 Erlangen E-mail: info@ching-coatings.com
Germany Website: https://www.ching-coatings.com

Department responsible for information

E-mail (competent person) msds@ching-coatings.com

1.4 Emergency telephone number

Emergency telephone number: +49 9131 3006 91
Only available during office hours.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Flam. Liq. 3	H226 Flammable liquid and vapour.
Eye Irrit. 2	H319 Causes serious eye irritation.
STOT RE 2	H373 May cause damage to organs through prolonged or repeated exposure.
Skin Irrit. 2	H315 Causes skin irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

GHS02 GHS07 GHS08 GHS09

Signal word

Warning

Hazard statements

H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection/face protection.

P370 + P378	In case of fire: Use extinguishing powder or sand to extinguish.
P403 + P235	Store in a well-ventilated place. Keep cool.

Hazard components for labelling

* bis-[4-(2,3-epoxipropoxi)phenyl]propane
* Cashew, nutshell liq., oligomeric reaction products with 1-chloro-2,3-epoxypropane
* Epoxy resin
* o-xylene

Supplemental hazard information

* not applicable

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]
*	25068-38-6 500-033-5 -	**Epoxy resin** Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Eye Irrit. 2 H319 ATE (oral): > 2,000 mg/kg ATE (dermal): > 2,000 mg/kg	12,5 < 15,0
*	1330-20-7 215-535-7 601-022-00-9	**o-xylene** 01-2119488216-32 Flam. Liq. 3 H226 / Asp. Tox. 1 H304 / Acute Tox. 4 H312 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Acute Tox. 4 H332 / STOT SE 3 H335 / STOT RE 2 H373 ATE (dermal): = 12,126 mg/kg ATE (oral): = 3,523 mg/kg ATE (dermal): = 1,100 mg/kg ATE (inhalative): = 27,571 mg/L (4 h)	10,0 < 12,5
*	1675-54-3 216-823-5 603-073-00-2	**bis-[4-(2,3-epoxipropoxi)phenyl]propane** 01-2119456619-26 Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Eye Irrit. 2 H319 / Aquatic Chronic 2 H411 Specific concentration limit (SCL) Eye Irrit. 2 H319: >= 5,00 / Skin Irrit. 2 H315: >= 5,00 ATE (dermal): = 23,000 mg/kg ATE (oral): > 15,000 mg/kg	7,00 < 8,00
*	68413-24-1 500-210-7 -	**Cashew, nutshell liq., oligomeric reaction products with 1-chloro-2,3-epoxypropane** 01-2119982994-15 Skin Sens. 1 H317	2,50 < 3,00
*	100-41-4 202-849-4 601-023-00-4	**ethylbenzene** 01-2119489370-35 Flam. Liq. 2 H225 / Asp. Tox. 1 H304 / Acute Tox. 4 H332 / STOT RE 2 H373 ATE (dermal): = 15,400 mg/kg ATE (oral): = 3,500 mg/kg	2,50 < 3,00
*	7779-90-0 231-944-3 030-011-00-6	**trizinc bis(orthophosphate)** 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)	2,00 < 2,50
*	78-83-1 201-148-0 603-108-00-1	**2-methylpropan-1-ol** 01-2119484609-23 Flam. Liq. 3 H226 / Skin Irrit. 2 H315 / Eye Dam. 1 H318 / STOT SE 3 H335 / STOT SE 3 H336 ATE (dermal): > 2,000 mg/kg ATE (oral): > 2,000 mg/kg ATE (inhalative): > 6.5 mg/L (4 h)	1,00 < 2,00

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 (CO2), 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 (CO2), Carbon monoxide, smoke, Nitrogen oxides (NOx).

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 LGK3 - Flammable liquids

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)
*	78-83-1	2-methylpropan-1-ol	WEL	154 / 231 (-) mg/m³
*	1317-65-3	Limestone	WEL	10 / - (-) mg/m³ (inhalable fraction)
*	1317-65-3	Limestone	WEL	4 / - (-) mg/m³ (respirable fraction)
*	14807-96-6	Talc (Mg3H2(SiO3)4)	WEL	1 / - (-) mg/m³ (respirable fraction)
*	100-41-4	ethylbenzene	WEL	441 / 552 (-) mg/m³ (may be absorbed through the skin)
*	1330-20-7	o-xylene	WEL	220 / 441 (-) mg/m³ (may be absorbed through the skin)
*	13463-67-7	titanium dioxide [in powder form containing 1 % or	WEL	4 / - (-) mg/m³

		more of particles with aerodynamic diameter ≤ 10 µm]		(respirable fraction)
*	13463-67-7	titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	WEL	10 / - (-) mg/m³ (inhalable fraction)

Additional information

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

Biological limit values

	CAS No.	Substance name	Source	Value/ Test material
*	1330-20-7	o-xylene	BMGV	650 mmol/mol creatinine / urine end of exposure or end of shift

DNEL worker

	CAS No.	Substance name	DNEL type	DNEL value
*	78-83-1	2-methylpropan-1-ol	DNEL long-term inhalative (local)	310 mg/m³
*	78-83-1	2-methylpropan-1-ol	DNEL long-term inhalative (systemic)	310 mg/m³
*	1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane	DNEL long-term dermal (systemic)	0.75 mg/kg
*	1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane	DNEL long-term inhalative (systemic)	4.93 mg/m³
*	100-41-4	ethylbenzene	DNEL long-term dermal (systemic)	180 mg/kg
*	100-41-4	ethylbenzene	DNEL long-term inhalative (systemic)	77 mg/m³
*	100-41-4	ethylbenzene	DNEL acute inhalative (local)	293 mg/m³
*	1330-20-7	o-xylene	DNEL acute dermal, short-term (local)	289 mg/kg
*	1330-20-7	o-xylene	DNEL acute dermal, short-term (systemic)	289 mg/kg
*	1330-20-7	o-xylene	DNEL long-term dermal (systemic)	180 mg/kg
*	1330-20-7	o-xylene	DNEL long-term inhalative (systemic)	77 mg/m³
*	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/m³

PNEC

	CAS No.	Substance name	PNEC type	PNEC Value
*	78-83-1	2-methylpropan-1-ol	PNEC aquatic, intermittent release	11 mg/L
*	78-83-1	2-methylpropan-1-ol	PNEC sewage treatment plant (STP)	10 mg/L
*	78-83-1	2-methylpropan-1-ol	PNEC sediment, marine water	0.152 mg/kg
*	78-83-1	2-methylpropan-1-ol	PNEC soil, freshwater	0.07 mg/kg
*	78-83-1	2-methylpropan-1-ol	PNEC sediment, freshwater	1.52 mg/kg
*	78-83-1	2-methylpropan-1-ol	PNEC aquatic, freshwater	0.4 mg/L
*	78-83-1	2-methylpropan-1-ol	PNEC aquatic, marine water	0.04 mg/L
*	1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane	PNEC aquatic, intermittent release	0.018 mg/L
*	1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane	PNEC sediment, marine water	0.034 mg/kg
*	1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane	PNEC sewage treatment plant	10 mg/L

			(STP)	
*	1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane	PNEC sediment, freshwater	0.341 mg/kg
*	1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane	PNEC aquatic, freshwater	0.006 mg/L
*	1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane	PNEC aquatic, marine water	0.001 mg/L
*	1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane	PNEC soil, freshwater	0.065 mg/kg
*	100-41-4	ethylbenzene	PNEC aquatic, intermittent release	0.1 mg/L
*	100-41-4	ethylbenzene	PNEC sewage treatment plant (STP)	9.6 mg/L
*	100-41-4	ethylbenzene	PNEC sediment, marine water	1.37 mg/kg
*	100-41-4	ethylbenzene	PNEC sediment, freshwater	13.7 mg/kg
*	100-41-4	ethylbenzene	PNEC aquatic, freshwater	0.1 mg/L
*	100-41-4	ethylbenzene	PNEC aquatic, marine water	0.01 mg/L
*	100-41-4	ethylbenzene	PNEC soil, freshwater	2.68 mg/kg
*	1330-20-7	o-xylene	PNEC aquatic, intermittent release	0.327 mg/L
*	1330-20-7	o-xylene	PNEC sewage treatment plant (STP)	6.58 mg/L
*	1330-20-7	o-xylene	PNEC sediment, marine water	12.46 mg/kg
*	1330-20-7	o-xylene	PNEC sediment, freshwater	12.46 mg/kg
*	1330-20-7	o-xylene	PNEC aquatic, freshwater	0.327 mg/L
*	1330-20-7	o-xylene	PNEC aquatic, marine water	0.327 mg/L
*	1330-20-7	o-xylene	PNEC soil, freshwater	2.31 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 >= 0.4 mm
Breakthrough time >= 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	white
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	136 °C
Flash point	26 °C
flammability	Flammable liquid and vapour.
Lower explosion limit at 20°C	1 Vol-%
	Source: ethylbenzene
Upper explosion limit at 20°C	10.9 Vol-%
	Source: 2-methylpropan-1-ol
Vapour pressure at 20°C	8.567 mbar
Relative vapour density	not applicable
Density at 20 °C	1.0 kg/l
Water solubility at 20°C	practically insoluble
Partition coefficient: n-octanol/water	see section 12
Auto-ignition temperature	430 °C
	Source: 2-methylpropan-1-ol
Decomposition temperature	not determined
Kinematic viscosity at 20 °C	> 700 mm²/s
Dynamic viscosity at 20 °C	> 700 mPas
Viscosity	> 40s / 6mm
particle characteristics	not applicable

9.2 Other information

Solid content	83.6 %
solvent content	16.4 %
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.

* **2-methylpropan-1-ol**
LD50: dermal (Rat): > 2,000 mg/kg

LD50: oral (Rat): > 2,000 mg/kg; (OECD 401)

LC50: inhalative (Rat): > 6.5 mg/L (4 h)

* **Epoxy resin**
LD50: oral (Rat): > 2,000 mg/kg

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

* **bis-[4-(2,3-epoxipropoxi)phenyl]propane**
LD50: dermal (Rabbit): = 23,000 mg/kg

LD50: oral (Rat): > 15,000 mg/kg

* **ethylbenzene**
LD50: dermal (Rabbit): = 15,400 mg/kg

LD50: oral (Rat): = 3,500 mg/kg

* **o-xylene**
LD50: dermal (Rabbit): = 12,126 mg/kg

LD50: oral (Rat): = 3,523 mg/kg; (OECD 423)

LD50: dermal (Rat): = 1,100 mg/kg

LC50: inhalative (Rat): = 27,571 mg/L (4 h)

* **trizinc bis(orthophosphate)**
LD50: oral (Rat): > 5,000 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

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

May cause damage to organs through prolonged or repeated exposure.

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.

* **o-xylene**
EC50 < 1,000 mg/L (15 h)

Algae toxicity

* **2-methylpropan-1-ol**
ErC50: (Scenedesmus subspicatus): = 1,250 mg/L (48 h)

* **bis-[4-(2,3-epoxipropoxi)phenyl]propane**
ErC50: (Scenedesmus quadricauda): = 11 mg/L (72 h)

* **ethylbenzene**
ErC50: (Pseudokirchneriella subcapitata): = 4.6 mg/L (72 h)

ErC50: (Pseudokirchneriella subcapitata): = 5.4 mg/L (72 h)

* **o-xylene**
ErC50: (Scenedesmus subspicatus): < 100 mg/L (72 h)
Method: OECD 201

* **trizinc bis(orthophosphate)**
ErC50: > 100 mg/L

Daphnia toxicity

* **2-methylpropan-1-ol**
EC50 (Daphnia magna (Big water flea)): = 1,439 mg/L (48 h)

* **bis-[4-(2,3-epoxipropoxi)phenyl]propane**
EC50 (Daphnia magna (Big water flea)): = 1.8 mg/L (48 h)

* **ethylbenzene**
EC50 (Daphnia magna (Big water flea)): = 2.1 mg/L (48 h)

* **o-xylene**
EC50 (Daphnia magna (Big water flea)): > 100 mg/L (48 h)
Method: OECD 202

EC50 (Daphnia magna (Big water flea)): < 165 mg/L (48 h)

* **trizinc bis(orthophosphate)**
EC50 (Daphnia magna (Big water flea)): > 1,000 mg/L (48 h)

Fish toxicity

* **2-methylpropan-1-ol**
LC50: (Leuciscus idus (golden orfe)): > 500 mg/L (96 h)
Method: OECD 203

* **bis-[4-(2,3-epoxipropoxi)phenyl]propane**
LC50: (Oncorhynchus mykiss (Rainbow trout)): = 2 mg/L (96 h)

* **ethylbenzene**
LC50: (Pimephales promelas (fathead minnow)): = 12.1 mg/L (96 h)

LC50: (Oncorhynchus mykiss (Rainbow trout)): = 4.2 mg/L (96 h)
Method: OECD 203

o-xylene

* LC50: (Oncorhynchus mykiss (Rainbow trout)): < 100 mg/L (96 h)
Method: OECD 203

LC50: (Oncorhynchus mykiss (Rainbow trout)): = 14 mg/L (96 h)

* **trizinc bis(orthophosphate)**
LC50: (Oncorhynchus mykiss (Rainbow trout)): > 1,000 mg/L (96 h)

LC50: > 5,000 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 1263

14.2 UN proper shipping name

Land transport (ADR/RID)

Paint

Sea transport (IMDG)

Paint

Air transport (ICAO-TI / IATA-DGR)

Paint

14.3 Transport hazard class(es)

Land transport (ADR/RID)	3
Sea transport (IMDG)	3
Air transport (ICAO-TI / IATA-DGR)	3

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

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: D/E
Limited quantity (LQ): 5 ltr
Hazard identification number (Kemler No.): 30

Sea transport (IMDG)

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

Air transport (ICAO-TI / IATA-DGR)

Limited quantity (LQ): 10 Liter

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: 164 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: 181 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
P5c FLAMMABLE LIQUIDS
Quantity 1: 5,000t; Quantity 2: 50,000t

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.

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

Flam. Liq. 3	On basis of test data.
Eye Irrit. 2	Calculation method.
STOT RE 2	Calculation method.
Skin Irrit. 2	Calculation method.
Skin Sens. 1	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
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
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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: 1.1
replaces revision of: 4 Feb 2025