

1.4 Emergency telephone number

0044 1775 761222 9am-5pm

See section 4 First aid measures.

Emergency telephone number (with hours of operation)

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Europe

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

1.1 Product identifier

Product name : Custom Epoxy Primer
Product identity : 4514800010, 00137E1A

Product type: epoxy primer (base for multi-component product)

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

Field of application: metal industry, ships and shipyards.

Ready-for-use mixture: 45141 = 45148 3 vol. / 97820 1 vol. 45143 = 45148 3 vol. / 97430 1 vol. Identified uses: Industrial applications, Professional applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details: Rustbuster Ltd

Unit 2 Welland House, Cradge Bank

Spalding, Lincs, UK

Pe113an

17 December 2024 5 December 2024.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

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

Flam. Liq. 3, H226 FLAMMABLE LIQUIDS

Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION

Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION

Skin Sens. 1, H317 SKIN SENSITIZATION

Aquatic Chronic 3, H412 AQUATIC HAZARD (LONG-TERM)
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Date of issue:

Date of previous issue:

Hazard pictograms:







Signal word: Danger

Hazard statements : H226 - Flammable liquid and vapor.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

Prevention: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking.

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

easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Hazardous ingredients: middle molecular epoxy resin MMW 700-1200

Methylstyrenated phenol

bisphenol A-(epichlorhydrin) epoxy resin MW =< 700

butan-1-ol benzyl alcohol

1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene

Supplemental label elements: Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Contains epoxy constituents. May produce an allergic reaction.

Special packaging requirements

SECTION 2: Hazards identification

Containers to be fitted with child-

Not applicable.

resistant fastenings:

Tactile warning of danger:

Not applicable.

2.3 Other hazards

See Section 15 for details. EU - Substances of very high concern - vPvB

Other hazards which do not result None known.

in classification:

SECTION 3: Composition/information on ingredients

3.2 Mixtures

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | | Туре |
|---|--|-----------|---|---|---------|
| tanium dioxide | REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2 | ≥10 - ≤25 | Carc. 2, H351 (inhalation) | - | [1] [*] |
| middle molecular epoxy resin MMW 700-1200 | CAS: 25068-38-6 Index: Polymer | ≥10 - ≤25 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 | Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5% | [1] |
| xylene | REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9 | ≥10 - ≤20 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 | ATE [Dermal] = 1100 mg/kg ATE [Inhalation (gases)] = 5000 ppm | [1] [2] |
| Methylstyrenated phenol | REACH #: 01-2119555274-38 EC: 270-966-8 CAS: 68512-30-1 | ≥5 - ≤10 | Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 3, H412 | - | [1] |
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-074-00-8 | ≥3 - ≤5 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 | Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5% | [1] |
| butan-1-ol | REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6 | ≥3 - ≤5 | Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 | ATE [Oral] = 790 mg/kg | [1] |
| ethylbenzene | REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4 | ≥3 - ≤4.2 | Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 | ATE [Inhalation (gases)] = 4500 ppm | [1] [2] |
| benzyl alcohol | REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5 | ≥1 - ≤3 | Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317 | ATE [Oral] = 1200 mg/kg | [1] |
| 1,3-bis(12-hydroxyocta- decanamide-N-methyle) benzene | REACH #: 01-0000016979-49 EC: 423-300-7 | ≥1 - ≤3 | Skin Sens. 1B, H317 Aquatic Chronic 4, H413 | - | [1] |
| | | | See Section 16 for the full text above. | of the H statements declared | |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit, see section 8.
- [*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix.

SECTION 4: First aid measures

4.1 Description of first aid measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth

to an unconscious person.

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate

treatment (first aid).

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15

 $minutes, \ occasionally \ lifting \ the \ upper \ and \ lower \ eyelids. \ Seek \ immediate \ medical \ attention/advice.$

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If

not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention

immediately.

Skin contact: Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or

thinners. Remove contaminated clothing and shoes.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm

and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so

that vomit will not re-enter the mouth and throat.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that

fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation: No known significant effects or critical hazards.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation: No specific data.

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion: Adverse symptoms may include the following:

stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed. Treat

symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested

or inhaled.

Specific treatments: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media: Recommended: alcohol resistant foam, CO₂, powders, water spray.

Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or

mixture:

Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products: Decomposition products may include the following materials: carbon oxides nitrogen oxides

halogenated compounds metal oxide/oxides

SECTION 5: Firefighting measures

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used. Contains epoxy constituents. Avoid all possible skin contact with epoxy and amine containing products, they may cause allergic reactions.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| xylene | EU OEL (Europe, 1/2022) [xylene, mixed isomers] Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³. |
| ethylbenzene | EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 442 mg/m³. STEL 15 minutes: 200 ppm. STEL 15 minutes: 884 mg/m³. |

Biological exposure indices

| Product/ingredient name | Exposure limit values | | |
|--------------------------------|-----------------------|--|--|
| No exposure limit value known. | | | |

Recommended monitoring procedures

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

| Product/ingredient name | Type - Population - Exposure | Value | Effects |
|--|---|-------------------------------|--|
| wlene | DNEL - Workers - Long term - Inhalation | 77 mg/m³ | Effects: Systemic |
| | DNEL - Workers - Long term - Dermal | 212 mg/kg bw/day | Effects: Systemic |
| Methylstyrenated phenol | DNEL - Workers - Long term - Dermal DNEL - Workers - Long term - Inhalation | 3.5 mg/kg bw/day 1.4 mg/m³ | Effects: Systemic Effects: Systemic |
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | DNEL - Workers - Long term - Dermal | 8.33 mg/kg bw/day | Effects: Systemic |
| ethylbenzene | DNEL - Workers - Long term - Inhalation | 12.25 mg/m³ | Effects: Systemic |
| | DNEL - Workers - Long term - Dermal | 180 mg/kg bw/day | Effects: Systemic |
| | DNEL - Workers - Long term - Inhalation | 77 mg/m³ | Effects: Systemic |
| benzyl alcohol | DNEL - Workers - Long term - Inhalation | 22 mg/m³ | Effects: Systemic |
| | DNEL - Workers - Long term - Dermal | 8 mg/kg bw/day | Effects: Systemic |

Predicted effect concentrations

| Product/ingredient name | Compartment Detail | Value |
|---|---|-----------------|
| M ene | Fresh water | 0.327 mg/l |
| , - | Marine water | 0.327 mg/l |
| | Fresh water sediment | 12.46 mg/kg |
| | Marine water sediment | 12.46 mg/kg |
| | Soil | 2.31 mg/kg |
| | Sewage Treatment Plant | 6.68 mg/l |
| Methylstyrenated phenol | Sewage Treatment Plant | 2.4 mg/l |
| | Fresh water | 14 μg/l |
| | Marine | 1.4 µg/l |
| | Fresh water sediment | 1064 mg/kg dwt |
| | Marine water sediment | 106 mg/kg dwt |
| | Soil | 212 mg/kg dwt |
| oisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | Fresh water | 0.006 mg/l |
| | Marine | 0.0006 mg/l |
| | Sewage Treatment Plant | 10 mg/l |
| | Fresh water sediment | 0.996 mg/l |
| | Marine water sediment | 0.0996 mg/l |
| | Soil | 0.196 mg/l |
| ethylbenzene | Fresh water | 0.1 mg/l |
| • | Marine water | 0.01 mg/l |
| | Sewage Treatment Plant | 9.6 mg/l |
| | Fresh water sediment | 13.7 mg/kg |
| | Soil | 2.68 mg/kg |
| penzyl alcohol | Soil - Assessment Factors | 0.456 mg/kg wwt |
| • | Sewage Treatment Plant - Assessment Factors | 39 mg/l |

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SECTION 8: Exposure controls/personal protection

Sediment - Assessment Factors

Marine water sediment - Assessment Factors

Marine - Assessment Factors
Fresh water - Assessment Factors

5.27 mg/kg wwt 0.527 mg/kg wwt 0.1 mg/l

1 mg/l

8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be

worn when soiling is so great that regular work clothes do not adequately protect skin against contact

with the product. Safety eyewear should be used when there is a likelihood of exposure.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking,

using lavatory, and at the end of day.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment

indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face

respirator may be required instead.

Hand protection: Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. The

quality of the chemical-resistant protective gloves must be chosen as a function of the specific

workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the

appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton®

May be used: nitrile rubber (>0.3 mm), butyl rubber (>0.5 mm)

Short term exposure: neoprene rubber (>0.1 mm), natural rubber (latex) (>0.4 mm), polyvinyl chloride

(PVC), nitrile rubber (>0.1 mm), butyl rubber (>0.3 mm)

Body protection: Personal protective equipment for the body should be selected based on the task being performed and

the risks involved handling this product.

Wear suitable protective clothing. Always wear protective clothing when spraying.

Chemical-resistant apron.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk

assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid.

Color: White

Odor: Solvent-like

pH: Testing not relevant or not possible due to nature of the product.

Melting point/freezing point: Testing not relevant or not possible due to nature of the product.

Boiling point/boiling range: Testing not relevant or not possible due to nature of the product.

Flash point: Closed cup: 27°C (80.6°F)

Evaporation rate : Testing not relevant or not possible due to nature of the product.

Flammability: Highly flammable in the presence of the following materials or conditions: open flames, sparks and

static discharge and heat.

Vapor pressure:

SECTION 9: Physical and chemical properties

| | Vapor Pressure at 20°C | | | Vaj | or pressur | e at 50°C |
|-----------------|------------------------|------|--------|-------|------------|-----------|
| Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |
| xylene | 6.7 | 0.89 | | | | |

Vapor density: Not available. Specific gravity: 1.46 g/cm³

Partition coefficient (LogKow): Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature :

 Ingredient name
 °C
 °F
 Method

 Methylstyrenated phenol
 >385
 >725
 DIN 51794

Decomposition temperature : Testing not relevant or not possible due to nature of the product.

Viscosity: Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.

Explosive properties: Explosive in the presence of the following materials or conditions: open flames, sparks and static

discharge and heat.

Oxidizing properties: Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 23 % Water % by weight : Weighted average: 0 %

VOC content: 322.8 g/l
VOC content, Ready-for-use 356.9 g/l

mixture:

TOC Content: Weighted average: 278 g/l
Solvent Gas: Weighted average: 0.081 m³/l

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

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials. Reactive or incompatible with the following materials: reducing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/oxides

SECTION 11: Toxicological information

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

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Epoxy and amine containing products can cause skin disorders such as allergic eczema. The allergy may arise after only a short exposure period.

Direct contact with the eyes can cause irreversible damage, including blindness.

Acute toxicity

| Product/ingredient name | Result | Dose / Exposure | Effects |
|---|--|---|--|
| jitanium dioxide | Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Inhalation - LC50 Dusts and | >5000 mg/kg >5000 mg/kg >6.8 mg/l [4 hours] | |
| middle molecular epoxy resin MMW 700-1200 | mists Rat - Dermal - LD50 | >2000 mg/kg | |
| xylene | Rabbit - Dermal - LD50 Rat - Oral - LD50 Rat - Inhalation - LC50 Vapor Rat - Inhalation - LC50 Gas. | >4200 mg/kg 3523 mg/kg 6350 ppm [4 hours] 5000 ppm [4 hours] | |
| Methylstyrenated phenol | Rat - Oral - LD50 Rat - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists | >2000 mg/kg >2000 mg/kg >2000 mg/kg >5 mg/l [4 hours] | |
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | Rat - Oral - LD50 | >2000 mg/kg | |
| butan-1-ol | Rabbit - Dermal - LD50 Rat - Dermal - LD50 Rabbit - Dermal - LD50 | >2000 mg/kg >2000 mg/kg 3400 mg/kg | Toxic effects: Eye - Corneal damage |
| butan-1-oi | Rat - Oral - LD50 | 790 mg/kg | Cardiac - Pulse rate Lung, Thorax, or Respiration - Dyspnea Toxic effects: Liver - Fatty liver degeneration Kidney, Ureter, and Bladder - |
| ethylbenzene | Rat - Inhalation - LC50 Vapor Rat - Oral - LD50 | 24000 mg/m³ [4 hours] 3500 mg/kg | Other changes Blood - Other changes Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes |
| benzyl alcohol | Rabbit - Dermal - LD50 Rat - Oral - LD50 Rat - Inhalation - LC50 Dusts and mists | >5000 mg/kg 1230 mg/kg >4178 mg/m³ [4 hours] | onanges |
| 1,3-bis(12-hydroxyocta-decanamide- N-methyle)benzene | Rat - Oral - LD50 | >2000 mg/kg | |
| | Rat - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists | >2000 mg/kg >5 mg/m³ [4 hours] | |

Acute toxicity estimates

| Product/ingredient name | Oral mg/kg | Dermal mg/kg | Inhalation (gases) ppm | Inhalation (vapors) mg/l | Inhalation (dusts and mists) mg/l |
|--------------------------------|-----------------|-----------------|------------------------------|--------------------------------|--|
| Hempadur 45148 Base | 18072.9 3523 | 7458.8 1100 | 27472.7 5000 | 354.0 | |
| xylene butan-1-ol | 790 | 3400 | 5000 | 24 | |
| ethylbenzene benzyl alcohol | 3500 1200 | | 4500 | 11 | |

Irritation/Corrosion

SECTION 11: Toxicological information

| Product/ingredient name | Result | Species | Exposure |
|--|--|--|--|
| titanium dioxide | Human - Skin - Mild irritant | Duration of treatment/ exposure: 72 hours | Amount/concentration applied: 300 Micrograms Intermittent |
| xylene | Rabbit - Eyes - Severe irritant | Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 5 milligrams |
| | Rabbit - Skin - Moderate irritant | Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 500 milligrams |
| | Rabbit - Skin - Irritant | | |
| Methylstyrenated phenol | Rabbit - Eyes - Mild irritant Rabbit - Skin - Irritant | | |
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | Rabbit - Eyes - Mild irritant | | |
| | Rabbit - Skin - Mild irritant | | |
| butan-1-ol | Rabbit - Eyes - Severe irritant | Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 2 milligrams |
| | Rabbit - Skin - Moderate irritant | Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 20 milligrams |
| ethylbenzene | Rabbit - Skin - Mild irritant | Duration of treatment/ exposure: 24 hours | Amount/concentration applied: 15 milligrams |
| benzyl alcohol | Rabbit - Respiratory - Mild irritant Rabbit - Eyes - Mild irritant Rabbit - Eyes - Visible necrosis Rabbit - Skin - Mild irritant | 5.,550 | |

Sensitizer

| Product/ingredient name | Species - Route of exposure | Result |
|--|-----------------------------|---------------------|
| middle molecular epoxy resin MMW 700-1200 | Guinea pig - skin | Result: Sensitizing |
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | Guinea pig - skin | Result: Sensitizing |

Mutagenic effects

No known data avaliable in our database.

Carcinogenicity

No known data avaliable in our database.

Reproductive toxicity

No known data avaliable in our database.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|--------------------------|-------------------|---|
| butan-1-ol | Category 3 Category 3 | | Respiratory tract irritation Narcotic effects |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|----------------|
| ethylbenzene | Category 2 | - | hearing organs |

Aspiration hazard

| Product/ingredient name | Result |
|-------------------------|--------------------------------|
| ethylbenzene | ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

No known significant effects or critical hazards.

11.2 Information on other hazards

Endocrine disrupting properties: The product does not meet the criteria to be considered as having endocrine disrupting properties

according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No

1272/2008

Other information: No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Harmful to aquatic life with long lasting effects.

| Product/ingredient name | Result | Species | Exposure |
|---|------------------------------|---|-------------------------|
| titanium dioxide | Acute - LC50 | Fish | >100 mg/l [96 hours] |
| | Acute - LC50 | Daphnia | >100 mg/l [48 hours] |
| middle molecular epoxy resin MMW 700-1200 | Acute - LC50 | Fish | >100 mg/l [96 hours] |
| | Acute - EC50 | Daphnia | >100 mg/l [48 hours] |
| Methylstyrenated phenol | Acute - EC50 | Daphnia | 14 - 51 mg/l [48 hours] |
| | Acute - EC50 | Algae | 15 mg/l [72 hours] |
| | Acute - EC50 | Fish | 25.8 mg/l [96 hours] |
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | Acute - EC50 | Algae | 11 mg/l [72 hours] |
| | Acute - LC50 | Fish | 2 mg/l [96 hours] |
| | Acute - EC50 | Daphnia | 1.8 mg/l [48 hours] |
| butan-1-ol | Acute - LC50 | Fish | 1.376 mg/l [96 hours] |
| | Acute - EC50 | Daphnia | 1328 mg/l [96 hours] |
| ethylbenzene | Chronic - NOEC - Fresh water | Algae - Green algae - Pseudokirchneriella subcapitata | <1000 µg/l [96 hours] |
| benzyl alcohol | Acute - LC50 | Fish | 460 mg/l [96 hours] |
| | Acute - EC50 | Daphnia | 230 mg/l [48 hours] |
| | Acute - IC50 | Algae | 770 mg/l [72 hours] |
| 1,3-bis(12-hydroxyocta-decanamide- N-methyle)benzene | Acute - LC50 | Fish | >100 mg/l [96 hours] |
| | Acute - LC50 | Algae | >100 mg/l [72 hours] |

12.2 Persistence and degradability

| Product/ingredient name | Test | Result |
|---|---|--|
| xy lene | | >60% [28 days] - Readily |
| | OECD Ready Biodegradability - Manometric Respirometry Test | 90 - 98% [28 days] - Readily |
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | OECD Inherent Biodegradability: Zahn-Wellens/ EMPA Test | 12% [28 days] - Not readily |
| butan-1-ol ethylbenzene | OECD Ready Biodegradability - Closed Bottle Test | 92% [20 days] >70% [28 days] - Readily |
| benzyl alcohol | OECD Ready Biodegradability - Modified MITI Test (I) | 92 - 96% [14 days] - Readily |
| 1,3-bis(12-hydroxyocta-decanamide- N-methyle)benzene | ÖECD Ready Biodegradability - DOC Die-Away Test | 95 - 97% [21 days] - Readily 5% [28 days] |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|---|
| Methylstyrenated phenol bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 butan-1-ol ethylbenzene benzyl alcohol 1,3-bis(12-hydroxyocta-decanamide- N-methyle)benzene | | | Readily Not readily Not readily Readily Readily Readily Readily Not readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|--|-------------|------------|-----------|
| middle molecular epoxy resin MMW 700-1200 | 2.64 - 3.78 | 31 | Low |
| xylene | 3.12 | 8.1 - 25.9 | Low |
| Methylstyrenated phenol | 3.627 | - | Low |
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | 2.64 - 3.78 | 31 | Low |
| butan-1-ol | 1 | 3.16 | Low |
| ethylbenzene | 3.6 | - | Low |
| benzyl alcohol | 0.87 | 1.37 | Low |

12.4 Mobility in soil

Soil/Water partition coefficient

SECTION 12: Ecological information

| Product/ingredient name | logKoc | Кос |
|--|---------------------|-------------------------------|
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | 1.59 3.26 | 39 1800 |
| | 0.51 2.23 1.1 | 3.22078 170.406 12.6442 |

Results of PMT and vPvM assessment

| Product/ingredient name | PMT | P | M | T | vPvM | νP | νM |
|---|-----|----|----|----|------|----|----|
| itanium dioxide | No | No | No | No | No | No | No |
| middle molecular epoxy resin MMW 700-1200 | No | No | No | No | No | No | No |
| xylene | No | No | No | No | No | No | No |
| Methylstyrenated phenol | No | No | No | No | No | No | No |
| bisphenol A-(epichlorhydrin) epoxy resin MW =< 700 | No | No | No | No | No | No | No |
| butan-1-ol | No | No | No | No | No | No | No |
| ethylbenzene | No | No | No | No | No | No | No |
| benzyl alcohol | No | No | No | No | No | No | No |
| 1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene | No | No | No | No | No | No | No |

Mobility:

The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

See Section 15 for details. EU - Substances of very high concern - vPvB

12.6 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.

European waste catalogue (EWC): 08 01 11*

Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

| | 14.1 UN / ID no. | 14.2 Proper shipping name | 14.3 Trans | port hazard class(es) | 14.4 PG* | 14.5 Env* | Additional information |
|------------------|---------------------|------------------------------|---------------|-----------------------|-------------|--------------|---------------------------------|
| ADR/RID Class | UN1263 | PAINT | 3 | | III | No. | Tunnel code (D/E) |
| IMDG Class | UN1263 | PAINT | 3 | | III | No. | Emergency schedules F-E, S-E |
| IATA Class | UN1263 | PAINT | 3 | | III | No. | - |

SECTION 14: Transport information

PG*: Packing group

Env.*: Environmental hazards

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

Annex XIV

None of the components are listed.

Substances of very high concern

| Ingredient name | Intrinsic property | Status | Reference number | Date of revision |
|-------------------------|--------------------|-----------|------------------|------------------|
| Methylstyrenated phenol | vPvB | Candidate | D(2023)8585-DC | 1/23/2024 |

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable.

Other EU regulations

Seveso category

This product is controlled under the Seveso III Directive.

| Seveso category |
|---|
| P5c: Flammable liquids 2 and 3 not falling under P5a or P5b |

15.2 Chemical Safety Assessment

SECTION 16: Other information

| Abbreviations and acronyms: | ATE = Acute Toxicity Estimate |
|-----------------------------|-------------------------------|
|-----------------------------|-------------------------------|

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

EUH statement = CLP-specific Hazard statement

RRN = REACH Registration Number DNEL = Derived No Effect Level

PNEC = Predicted No Effect Concentration

Full text of abbreviated H statements : H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor. H302 Harmful if swallowed.

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.
H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.
 H413 May cause long lasting harmful effects to aquatic life.

Full text of classifications [CLP/GHS]: Acute Tox. 4 ACUTE TOXICITY - Category 4

Aquatic Chronic 2 AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3 AQUATIC HAZARD (LONG-TERM) - Category 3
Aquatic Chronic 4 AQUATIC HAZARD (LONG-TERM) - Category 4

Asp. Tox. 1 ASPIRATION HAZARD - Category 1 Carc. 2 CARCINOGENICITY - Category 2

Eye Dam. 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2

SECTION 16: Other information

Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2
SKIN SENSITIZATION - Category 1
SKIN SENSITIZATION - Category 1B
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3 Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1B

STOT RE 2 STOT SE 3

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|----------------------------|---------------------------------------|
| | On basis of test data |
| | Calculation method Calculation method |
| | Calculation method |
| AQUATIC HAZARD (LONG-TERM) | Calculation method |

Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor or outdoor spray painting by professionals or with brush, roller, putty knife, dipping etc. with good general room ventilation

This safe use information is linked to

: Professional spray painting and/or low-energy painting

benzyl alcohol

Sector(s) of use

: Industrial uses - Professional uses

Product category(ies)

: Coatings and paints, thinners, paint removers

Operational conditions

Place of use : Indoor or outdoor use

Risk management measures (RMM)

| Contributing | Process category (ies) | Maximum duration | Ventilation Type and air changes per hour | | Respiratory | Eye | Hands |
|--|------------------------------|---------------------|--|-------|--|---|---------------------------------------|
| activity | | | | | | | |
| Preparation of material for application | PROC05 | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Loading of application equipment and handling of coated parts before curing | PROC08a | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Professional application of coatings by brush or roller | PROC10 | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Professional application of coatings by spraying | PROC11 | 1 to 4 hours | Good general room ventilation - Outdoors | 3 - 5 | Wear a respirator conforming to EN140 with an assigned protection factor of at least 10. | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Industrial application of coatings by spraying | PROC07 | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | Wear a respirator conforming to EN140 with an assigned protection factor of at least 10. | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Film formation - force drying, stoving and other technologies | PROC04 | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | None | None |
| Cleaning | PROC05 | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |
| Waste management | PROC08a | More than 4 hours | Good general room ventilation - Outdoors | 3 - 5 | None | Use eye protection according to EN 166. | Wear suitable gloves tested to EN374. |

See section 8 of this Safety Data Sheet for specifications.







