

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

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

1.1 Product identifier

Product identifier : HG 736
Product name : Permasolid® HS Mixing Colour 275 BRILLIANT RED
Product type : Liquid.
Other means of identification : 4025331237075
Date of issue/ Date of revision : 21 April 2024
Version : 1.07
Date of previous issue : 4 April 2024

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

Identified uses : Coating component.
Uses advised against : Not for sale to or use by consumers.

1.3 Details of the supplier of the safety data sheet

Axalta Coating Systems Germany GmbH & Co. KG
Christbusch 25
DE 42285 Wuppertal
+49 (0)202 529-0
e-mail address of person responsible for this SDS : sds-competence@axalta.com

1.4 Emergency telephone number

Supplier

Telephone number : +(44)-870-8200418
Hours of operation :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture
Classification according to UK CLP/GHS
Flam. Liq. 3, H226
Skin Sens. 1, H317
STOT SE 3, H336
Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms :



Signal word :

Warning

Contains :

n-butyl acetate

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
2,3-epoxypropyl neodecanoate
2-hydroxyethyl methacrylate

Hazard statements :

H226 - Flammable liquid and vapour.
H317 - May cause an allergic skin reaction.
H336 - May cause drowsiness or dizziness.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention :

P280 - Wear protective gloves.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.
P261 - Avoid breathing vapour.

Response :

P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.
P302 + P352 - IF ON SKIN: Wash with plenty of water.

Storage :

Not applicable.

Disposal :

Not applicable.

Supplemental label elements :

EUH066 - Repeated exposure may cause skin dryness or cracking.
EUH205 - Contains epoxy constituents. May produce an allergic reaction.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles :

Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII :

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification :

None known.

The mixture may be a skin sensitiser. It may also be a skin irritant and repeated contact may increase this effect.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

| Product/ingredient name | Identifiers | % | Classification | Type |
|-----------------------------|--|-----------|---|---------|
| n-butyl acetate | REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 | ≥25 - ≤50 | Flam. Liq. 3, H226 STOT SE 3, H336 EUH066 | [1] [2] |
| Hydrocarbons, C9, aromatics | REACH #: 01-2119455851-35 EC: 918-668-5 | ≤10 | Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066 | [1] |

SECTION 3: Composition/information on ingredients

| | | | | |
|---|---|------|---|---------|
| isopentyl acetate | REACH #: 01-2119548408-32 EC: 204-662-3 CAS: 123-92-2 Index: 607-130-00-2 | ≤3 | Flam. Liq. 3, H226 EUH066 | [1] [2] |
| heptan-2-one | REACH #: 01-2119902391-49 EC: 203-767-1 CAS: 110-43-0 | ≤3 | Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332 STOT SE 3, H336 | [1] [2] |
| Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | REACH #: 01-2119491304-40 EC: 915-687-0 CAS: 1065336-91-5 | ≤1 | Skin Sens. 1A, H317 Repr. 2, H361 (oral) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) | [1] |
| 2,3-epoxypropyl neodecanoate | REACH #: 01-2119431597-33 EC: 247-979-2 CAS: 26761-45-5 | <1 | Skin Sens. 1A, H317 Muta. 2, H341 Repr. 2, H361 Aquatic Chronic 2, H411 | [1] |
| 2-hydroxyethyl methacrylate | REACH #: 01-2119490169-29 EC: 212-782-2 CAS: 868-77-9 Index: 607-124-00-X | ≤0.2 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 | [1] |
| cetrimonium chloride | REACH #: 01-2119970558-23 EC: 203-928-6 CAS: 112-02-7 | <0.1 | Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) See Section 16 for the full text of the H statements declared above. | [1] |

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a physical, health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SECTION 4: First aid measures

- Skin contact** : Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- 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

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO₂, powders, water spray.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous combustion products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

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SECTION 5: Firefighting measures

- Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

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). Preferably clean with a detergent. Avoid using solvents.

- 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

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

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

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Seveso Directive - Reporting thresholds

Permasolid® HS Mixing Colour 275 BRILLIANT RED

SECTION 7: Handling and storage

Danger criteria

| Category | Notification and MAPP threshold | Safety report threshold |
|----------|---------------------------------|-------------------------|
| P5c | 5000 tonne | 50000 tonne |

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| n-butyl acetate | EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 966 mg/m ³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 724 mg/m ³ 8 hours. TWA: 150 ppm 8 hours. |
| isopentyl acetate | EH40/2005 WELs (United Kingdom (UK), 1/2020). [pentyl acetates (all isomers)] STEL: 541 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. TWA: 270 mg/m ³ 8 hours. |
| heptan-2-one | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 475 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 237 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. |

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|-------------------------|------|----------------------|------------------------|--------------------|----------|
| n-butyl acetate | DNEL | Short term Dermal | 11 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Oral | 2 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Oral | 2 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 3.4 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Dermal | 6 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 7 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Dermal | 11 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 12 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 35.7 mg/m ³ | General population | Local |

SECTION 8: Exposure controls/personal protection

| | | | | | |
|---|------|-----------------------|--------------------------|--------------------|----------|
| | DNEL | Long term Inhalation | 48 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 300 mg/m ³ | General population | Local |
| | DNEL | Short term Inhalation | 300 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 300 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 600 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 600 mg/m ³ | Workers | Systemic |
| Hydrocarbons, C9, aromatics | DNEL | Long term Inhalation | 150 mg/m ³ | Workers | Systemic |
| isopentyl acetate | DNEL | Long term Dermal | 25 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Oral | 1.47 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 1.47 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 2.95 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 5.1 mg/m ³ | General population | Systemic |
| heptan-2-one | DNEL | Long term Inhalation | 20.8 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 83.2 ppm | Workers | Systemic |
| | DNEL | Long term Oral | 23.32 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 23.32 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 54.27 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 84.31 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 394.25 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 1516 mg/m ³ | Workers | Systemic |
| Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | DNEL | Long term Inhalation | 3.53 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 2 mg/kg | Workers | Systemic |
| | DNEL | Long term Oral | 0.18 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 0.31 mg/m ³ | General population | Systemic |
| | DNEL | Long term Dermal | 0.9 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 1.27 mg/m ³ | Workers | Systemic |
| 2,3-epoxypropyl neodecanoate | DNEL | Long term Dermal | 1.8 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Oral | 2.5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 2.5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 4 mg/m ³ | General population | Systemic |
| | DNEL | Long term Dermal | 4.2 mg/kg bw/day | Workers | Systemic |

SECTION 8: Exposure controls/personal protection

| | | | | | |
|-----------------------------|------|----------------------|------------------------|--------------------|----------|
| 2-hydroxyethyl methacrylate | DNEL | Long term Inhalation | 5.88 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.908 ppm | Workers | Systemic |
| | DNEL | Long term Oral | 0.83 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.83 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 1.39 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 1.45 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 4.9 mg/m ³ | Workers | Systemic |

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|--|------------------------|----------------|--------------------|
| n-butyl acetate | Soil | 0.09 mg/kg | - |
| | Fresh water | 0.18 mg/l | - |
| | Sewage Treatment Plant | 35.6 mg/l | - |
| | Marine water | 0.018 mg/l | - |
| | Fresh water sediment | 0.981 mg/kg | - |
| | Marine water sediment | 0.098 mg/kg | - |
| | isopentyl acetate | Fresh water | 0.011 mg/l |
| Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Marine water | 0.001 mg/l | - |
| | Fresh water sediment | 0.335 mg/kg | - |
| | Marine water sediment | 0.034 mg/kg | - |
| | Sewage Treatment Plant | 30 mg/l | - |
| | Soil | 0.06 mg/kg dwt | - |
| | Fresh water | 0.0022 mg/l | - |
| | Marine water | 0.00022 mg/l | - |
| | Secondary Poisoning | 0.009 mg/l | - |
| | Fresh water sediment | 1.05 mg/kg | - |
| | Marine water sediment | 0.11 mg/kg | - |
| 2-hydroxyethyl methacrylate | Soil | 0.21 mg/kg | - |
| | Sewage Treatment Plant | 1 mg/l | - |
| | Fresh water | 0.482 mg/l | - |
| | Marine water | 0.482 mg/l | - |
| | Sewage Treatment Plant | 10 mg/l | - |
| | Fresh water sediment | 3.79 mg/kg | - |
| | Marine water sediment | 3.79 mg/kg | - |
| cetrimonium chloride | Soil | 0.476 mg/kg | - |
| | Fresh water | 0.42 µg/l | Assessment Factors |
| | Sewage Treatment Plant | 0.4 mg/l | Assessment Factors |
| | Fresh water sediment | 68 mg/kg | - |
| | Marine water sediment | 6.8 mg/kg | - |
| | Marine water | 0.042 µg/l | - |

8.2 Exposure controls

Appropriate engineering controls

: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

Individual protection measures

SECTION 8: Exposure controls/personal protection

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Use safety eyewear designed to protect against splash of liquids.

Skin protection

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Gloves : Duration / breakthrough time: <1 hour,
Glove material: NBR, nitrile rubber, material thickness as splash protection: at least 0.2 mm, (EN374)
Glove material: NBR, nitrile rubber Material thickness for short-term contact: at least 0.5 mm, (EN374)

The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

Expert judgment

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Body protection : Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flattening should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Environmental exposure controls : Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Magenta.

Odour : Not available.

Odour threshold : Not available.

Melting point/freezing point : Technically not possible to measure

SECTION 9: Physical and chemical properties

| | |
|---|---|
| Initial boiling point and boiling range | : 125 to 200°C (257 to 392°F) |
| Flammability (solid, gas) | : Not available. |
| Upper/lower flammability or explosive limits | : Lower: 0.7% Upper: 7.5% Not available. |
| Flash point | : Closed cup: 25.04°C (77.1°F) |
| Auto-ignition temperature | : 280°C (536°F) |
| Decomposition temperature | : Not applicable. |
| pH | : Not applicable. |
| Viscosity | : Dynamic (room temperature): 136 mPa·s Kinematic (room temperature): 132 mm ² /s Kinematic (40°C): >20.5 mm ² /s |
| Solubility in water | : Not available. |
| Miscible with water | : No. |
| Partition coefficient: n-octanol/ water | : Not applicable. |
| Vapour pressure | : 0.52 kPa (3.9 mm Hg) |
| Relative density | : Not available. |
| Density | : 1.031 g/cm ³ |
| Vapour density | : Not available. |
| Explosive properties | : Not available. |
| Oxidising properties | : Not available. |
| Weight volatiles | : 38.4 % (w/w) |
| VOC content | : 37 % (w/w) (2010/75/EU) |

9.2 Other information**9.2.1 Information with regard to physical hazard classes**

Flow time (ISO 2431) : 98 s (room temperature) [Jet diameter: 4 mm]

Further information Not available.

9.2.2 Other safety characteristics

Miscible with water : No.

Further information Not available.

room temperature (=20°C)

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 under recommended storage and handling conditions (see Section 7).

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

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Not applicable

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture 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.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

Contains Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate, 2,3-epoxypropyl neodecanoate, 2-hydroxyethyl methacrylate. May produce an allergic reaction.

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|------------------------|--------------------|--------------|----------|
| n-butyl acetate | LC50 Inhalation Vapour | Rat | 21.1 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >17600 mg/kg | - |
| | LD50 Oral | Rat | 10768 mg/kg | - |
| Hydrocarbons, C9, aromatics | LD50 Dermal | Rabbit | >3160 mg/kg | - |
| | LD50 Oral | Rat - Female | 3492 mg/kg | - |
| isopentyl acetate | LD50 Dermal | Rabbit | >5 g/kg | - |
| | LD50 Oral | Rat | 16600 mg/kg | - |
| heptan-2-one | LC50 Inhalation Vapour | Rat | 16.8 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 10332 mg/kg | - |
| | LD50 Oral | Rat | 1600 mg/kg | - |
| Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | LD50 Dermal | Rat - Male, Female | >3170 mg/kg | - |
| | LD50 Oral | Rat - Male, Female | 3230 mg/kg | - |
| 2,3-epoxypropyl neodecanoate | LD50 Dermal | Rat | 3800 mg/kg | - |
| | LD50 Oral | Rat | >10 g/kg | - |
| 2-hydroxyethyl methacrylate | LD50 Oral | Rat | 5050 mg/kg | - |
| | LD50 Oral | Rat - Female | 1550 mg/kg | - |

Acute toxicity estimates

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SECTION 11: Toxicological information

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|--|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| mixture | 79463.9 | N/A | N/A | 834.4 | N/A |
| n-butyl acetate | 10768 | N/A | N/A | 21.1 | N/A |
| Hydrocarbons, C9, aromatics | 3492 | N/A | N/A | N/A | N/A |
| isopentyl acetate | 16600 | N/A | N/A | N/A | N/A |
| heptan-2-one | 1600 | 10332 | N/A | 16.8 | N/A |
| Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 3230 | N/A | N/A | N/A | N/A |
| 2,3-epoxypropyl neodecanoate | N/A | 3800 | N/A | N/A | N/A |
| 2-hydroxyethyl methacrylate | 5050 | N/A | N/A | N/A | N/A |
| cetrimonium chloride | 1550 | N/A | N/A | N/A | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-----------------------------|-------------------------|---------|-------|----------------|-------------|
| isopentyl acetate | Skin - Erythema/Eschar | Rabbit | 1.7 | - | - |
| heptan-2-one | Skin - Mild irritant | Rabbit | - | 24 hours 14 mg | - |
| 2-hydroxyethyl methacrylate | Skin - Irritant | Rabbit | - | - | - |
| cetrimonium chloride | Skin - Visible necrosis | Rabbit | - | 4 hours | 10 days |

Sensitisation**Mutagenicity**

| Product/ingredient name | Test | Experiment | Result |
|------------------------------|------|---|----------|
| 2,3-epoxypropyl neodecanoate | - | Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic | Positive |

Carcinogenicity**Reproductive toxicity****Teratogenicity****Specific target organ toxicity (single exposure)**

| Product/ingredient name | Category | Route of exposure | Target organs |
|-----------------------------|------------|-------------------|------------------------------|
| n-butyl acetate | Category 3 | - | Narcotic effects |
| Hydrocarbons, C9, aromatics | Category 3 | - | Respiratory tract irritation |
| heptan-2-one | Category 3 | - | Narcotic effects |
| | Category 3 | - | Narcotic effects |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

| Product/ingredient name | Result |
|-----------------------------|--------------------------------|
| Hydrocarbons, C9, aromatics | ASPIRATION HAZARD - Category 1 |

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

SECTION 11: Toxicological information

- Skin contact** : Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
- Ingestion** : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- Conclusion/Summary** : Not available.
- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|------------------------------------|---|----------|
| n-butyl acetate | Acute LC50 185 ppm Marine water | Fish - Inland silverside - <i>Menidia beryllina</i> | 96 hours |
| Hydrocarbons, C9, aromatics | Acute LC50 9.2 mg/l | Fish - Trout - <i>Oncorhynchus mykiss</i> | 96 hours |
| isopentyl acetate | Acute LC50 11.1 mg/l | Fish | 96 hours |
| heptan-2-one | Acute LC50 131000 µg/l Fresh water | Fish - Fathead minnow - <i>Pimephales promelas</i> | 96 hours |
| Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl | Acute EC50 1.68 mg/l Fresh water | Algae | 72 hours |

SECTION 12: Ecological information

| | | | |
|--|--|---|--|
| 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | Acute LC50 0.9 mg/l Chronic NOEC 1 mg/l Fresh water | Fish - <i>Brachydanio rerio</i> Daphnia | 96 hours 21 days |
| 2,3-epoxypropyl neodecanoate | Acute LC50 9.6 mg/l | Fish | 96 hours |
| 2-hydroxyethyl methacrylate | Chronic EC50 4.8 mg/l Acute LC50 227000 µg/l Fresh water | Daphnia Fish - Fathead minnow - <i>Pimephales promelas</i> - Juvenile (Fledgling, Hatchling, Weanling) | 48 hours 96 hours |
| cetrimonium chloride | Acute EC50 0.0149 mg/l Fresh water Acute LC50 100 µg/l Fresh water Acute LC50 100 µg/l Fresh water Chronic NOEC 0.007 mg/l Fresh water Chronic NOEC 0.032 mg/l | Daphnia - Water flea - <i>Daphnia magna</i> - Neonate Crustaceans - Scud, Amphipod - <i>Gammarus sp.</i> Fish - Bluegill - <i>Lepomis macrochirus</i> Daphnia Fish - <i>Pimephales promelas</i> | 48 hours 48 hours 96 hours 21 days 28 days |

Conclusion/Summary : Not available.

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|-------------------------|---|--------------------------|------|----------|
| isopentyl acetate | OECD 301C Ready Biodegradability - Modified MITI Test (I) | 88 % - Readily - 28 days | - | - |

Conclusion/Summary : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| isopentyl acetate | - | - | Readily |
| cetrimonium chloride | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|------------------------------|--------------------|-----|-----------|
| n-butyl acetate | 2.3 | - | Low |
| isopentyl acetate | 2.25 | - | Low |
| heptan-2-one | 2.26 | - | Low |
| 2,3-epoxypropyl neodecanoate | 4.4 | - | High |
| 2-hydroxyethyl methacrylate | 0.42 | - | Low |
| cetrimonium chloride | 3.23 | 160 | Low |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.





Packaging

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

| Type of packaging | Waste catalogue |
|-------------------|--|
| | 15 01 10* packaging containing residues of or contaminated by hazardous substances |

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|---------------------------------|--|--|---|--|
| 14.1 UN number | UN1263 | UN1263 | UN1263 | UN1263 |
| 14.2 UN proper shipping name | PAINT | PAINT | PAINT | PAINT |
| 14.3 Transport hazard class(es) | 3  | 3  | 3  | 3  |
| 14.4 Packing group | III | III | III | III |
| 14.5 Environmental hazards | No. | Yes. | No. | No. |

Additional information

ADR/RID : **Tunnel code** (D/E)

ADN : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.

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.

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SECTION 14: Transport information

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

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

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P5c

National regulations

| Product/ingredient name | List name | Name on list | Classification | Notes |
|-------------------------|-----------|--------------|----------------|-------|
| | | | | |

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

🔍 Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
 GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = GB CLP-specific Hazard statement
 N/A = Not available
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 SGG = Segregation Group
 vPvB = Very Persistent and Very Bioaccumulative

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SECTION 16: Other information

Procedure used to derive the classification

| Classification | Justification |
|--|---|
| Flam. Liq. 3, H226 Skin Sens. 1, H317 STOT SE 3, H336 Aquatic Chronic 3, H412 | On basis of test data Calculation method Calculation method Calculation method |

Full text of abbreviated H statements

| | |
|--------|---|
| H226 | Flammable liquid and vapour. |
| 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. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H341 | Suspected of causing genetic defects. |
| H361 | Suspected of damaging fertility or the unborn child. |
| 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. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

Full text of classifications

| | |
|-------------------|---|
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Acute 1 | SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 1 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| Muta. 2 | GERM CELL MUTAGENICITY - Category 2 |
| Repr. 2 | REPRODUCTIVE TOXICITY - Category 2 |
| Skin Corr. 1C | SKIN CORROSION/IRRITATION - Category 1C |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| Skin Sens. 1A | SKIN SENSITISATION - Category 1A |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

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SECTION 16: Other information

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