

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

SAFETY DATA SHEET

Eclipse High Solids Polyurethane Enamel ECL-F-1

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

1.1 Product identifier

Product name : Eclipse High Solids Polyurethane Enamel ECL-F-1
SDS code : 004686

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

| Identified uses |
|----------------------|
| Industrial use |
| Uses advised against |
| Consumer use |

Product use : FOR INDUSTRIAL USE ONLY

1.3 Details of the supplier of the safety data sheet

Manufacturer : AkzoNobel Aerospace Coatings
Rijksstraatweg 31
2171 AJ Sassenheim
P.O. Box 3
2170 BA Sassenheim
The Netherlands
Tel. +31 (0)71 308 6944

e-mail address of person responsible for this SDS : PSRA_SSH@akzonobel.com

1.4 Emergency telephone number

National advisory body/Poison Center

Supplier

Telephone number : + 31 (0)71 308 6944
Hours of operation : 24 hours

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. 2, H225
Acute Tox. 4, H302
Skin Sens. 1, H317
STOT SE 3, H336
Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Date of issue/Date of revision : 11/29/2023

Version : 1

Date of previous issue : No previous validation

1/17

SECTION 2: Hazards identification

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

Hazard pictograms :



Signal word : Danger

Hazard statements : Highly flammable liquid and vapor.
Harmful if swallowed.
May cause an allergic skin reaction.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response : Not applicable.

Storage : Store in a well-ventilated place.

Disposal : Not applicable.

Hazardous ingredients : heptan-2-one
Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
Hydrocarbons, terpene processing by-products
Mixture of alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Supplemental label elements : Not applicable.

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

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : 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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|-----------|--|---|---------|
| heptan-2-one | REACH #: 01-2119902391-49 EC: 203-767-1 CAS: 110-43-0 Index: 606-024-00-3 | ≥25 - ≤50 | Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332 STOT SE 3, H336 | - | [1] [2] |
| pentane-2,4-dione | REACH #: 01-2119458968-15 EC: 204-634-0 CAS: 123-54-6 Index: 606-029-00-0 | ≤3 | Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 3, H331 | - | [1] |
| butanone | REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3 | ≤3 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 | - | [1] [2] |
| n-butyl acetate | REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1 | <1 | Flam. Liq. 3, H226 STOT SE 3, H336 EUH066 | - | [1] |
| 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 CAS: 1065336-91-5 | ≤1 | Skin Sens. 1A, H317 Repr. 2, H361f (Fertility) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) | - | [1] |
| Hydrocarbons, terpene processing by-products | REACH #: 01-2119980606-28 EC: 273-309-3 CAS: 68956-56-9 | <1 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 | - | [1] |
| 2-methoxy-1-methylethyl acetate | REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7 | ≤1 | Flam. Liq. 3, H226 | - | [2] |
| solvent naphtha (petroleum), light arom. | REACH #: 01-2119455851-35 EC: 265-199-0 CAS: 64742-95-6 Index: 649-356-00-4 | <1 | Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066 | - | [1] |
| butyl glycollate | REACH #: 01-2119514685-36 EC: 230-991-7 | ≤0.3 | Eye Dam. 1, H318 Repr. 2, H361fd (Fertility and Unborn | - | [1] |

SECTION 3: Composition/information on ingredients

| | | | | | |
|--|---|------|--|---|-----|
| Mixture of alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) | CAS: 7397-62-8 REACH #: 01-0000015075-76 EC: 400-830-7 | ≤0.3 | child) (oral) Skin Sens. 1, H317 Aquatic Chronic 2, H411 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 health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

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

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 unconscious, place in recovery position and seek medical advice.
- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- 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

SECTION 4: First aid measures

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 vapor 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.

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, Hydrocarbons, terpene processing by-products, Mixture of alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl). May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician**
- : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments**
- : No specific treatment.

See toxicological information (Section 11)

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

- 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 vapor or mist. Refer to protective measures listed in sections 7 and 8.
- For emergency responders** : If specialized 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 materials 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

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds (in tonnes)

Danger criteria

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

SECTION 7: Handling and storage

7.3 Specific end use(s)

Recommendations : Not available.
Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|---------------------------------|--|
| heptan-2-one | EU OEL (Europe, 6/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 50 ppm 8 hours. TWA: 238 mg/m³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 475 mg/m³ 15 minutes. |
| butanone | |
| 2-methoxy-1-methylethyl acetate | |

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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.

DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|---------------------------|------|----------|-------|------------|---------|
| No DNELs/DMELs available. | | | | | |

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|-------------------------|--------------------|-------|---------------|
| No PNECs available. | | | |

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

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 vapors below the OEL, suitable respiratory protection must be worn.

Individual protection measures

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

Gloves : For prolonged or repeated handling, use the following type of gloves:

Recommended: butyl rubber
Not recommended: nitrile rubber

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

Best Practice Guideline 5 "Safe Use of Gloves" (June 2010) published by the European Solvents Industry Group (ESIG), available at <http://www.esig.org/en/library/publications/best-practice-guides>

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 fibers or of high-temperature-resistant synthetic fibers.

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/flatting 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

9.1 Information on basic physical and chemical properties

Appearance

| | | |
|--|--------------------|------------------|
| Physical state | : Liquid. | |
| Color | : Yellowish. | |
| Odor | : Solvent. | |
| Odor threshold | : Not available. | |
| pH | : Not available. | [DIN EN 1262] |
| Melting point/freezing point | : Not available. | |
| Initial boiling point and boiling range | : | |
| Flash point | : Closed cup: -4°C | [Pensky-Martens] |
| Evaporation rate | : Not available. | |

SECTION 9: Physical and chemical properties

| | | |
|---|---|---------------------|
| Flammability (solid, gas) | : Not available. | |
| Upper/lower flammability or explosive limits | : Greatest known range: Lower: 1.8% Upper: 11.5% (butanone) | |
| Vapor pressure | : | |
| Vapor density | : Highest known value: 3.45 (Air = 1) (pentane-2,4-dione). Weighted average: 3.27 (Air = 1) | |
| Relative density | : 1.069 | [DIN EN ISO 2811-1] |
| Solubility(ies) | : Not available. | |
| Partition coefficient: n-octanol/ water | : Not available. | |
| Auto-ignition temperature | : | |
| Decomposition temperature | : Not available. | |
| Viscosity | : Kinematic (room temperature): 1.68 cm ² /s | [DIN EN ISO 3219] |
| <u>Particle characteristics</u> | | |
| Median particle size | : Not applicable. | |

9.2 Other information

No specific data.

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: oxidizing agents, strong alkalis, strong acids. |
| 10.6 Hazardous decomposition products | : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen. |

SECTION 11: Toxicological information

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

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 vapor 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

SECTION 11: Toxicological information

short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

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, Hydrocarbons, terpene processing by-products, Mixture of alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl). May produce an allergic reaction.

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---------------------------------|--|--------------|--------------|----------|
| heptan-2-one | LC50 Inhalation Vapor | Rat | 16.7 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 12600 uL/kg | - |
| | LD50 Intraperitoneal | Mouse | 400 mg/kg | - |
| | LD50 Intraperitoneal | Rat | 800 mg/kg | - |
| | LD50 Oral | Mouse | 730 mg/kg | - |
| | LD50 Oral | Rat | 1670 mg/kg | - |
| | LD50 Oral | Rat | 1600 mg/kg | - |
| pentane-2,4-dione | LC50 Inhalation Vapor | Rat | 5.1 mg/l | 4 hours |
| | LD50 Dermal | Rat | 790 mg/kg | - |
| | LD50 Oral | Rat - Female | 570 mg/kg | - |
| butanone | LC50 Inhalation Vapor | Mouse | 32 g/m³ | 4 hours |
| | LC50 Inhalation Vapor | Rat | 23500 mg/m³ | 8 hours |
| | LD50 Dermal | Rabbit | 6480 mg/kg | - |
| | LD50 Intraperitoneal | Guinea pig | 2 g/kg | - |
| | LD50 Intraperitoneal | Mouse | 616 mg/kg | - |
| | LD50 Intraperitoneal | Rat | 607 mg/kg | - |
| | LD50 Oral | Mouse | 3000 mg/kg | - |
| n-butyl acetate | LD50 Oral | Rat | 2737 mg/kg | - |
| | LC50 Inhalation Gas. | Rat | 390 ppm | 4 hours |
| | LC50 Inhalation Vapor | Mouse | 6 g/m³ | 2 hours |
| | LC50 Inhalation Vapor | Rat | 390 ppm | 4 hours |
| | LD50 Dermal | Rabbit | >17600 mg/kg | - |
| | LD50 Intraperitoneal | Mouse | 1230 mg/kg | - |
| | LD50 Oral | Guinea pig | 4700 mg/kg | - |
| 2-methoxy-1-methylethyl acetate | LD50 Oral | Mouse | 6 g/kg | - |
| | LD50 Oral | Rabbit | 3200 mg/kg | - |
| | LD50 Oral | Rat | 10768 mg/kg | - |
| | LD50 Dermal | Rabbit | 6 g/kg | - |
| | Solvent naphtha (petroleum), light arom. | Rat | 8400 mg/kg | - |

Conclusion/Summary : Not available.

Acute toxicity estimates

| Route | ATE value |
|---------------------|---------------|
| Oral | 1052.5 mg/kg |
| Dermal | 28883.8 mg/kg |
| Inhalation (vapors) | 30.89 mg/l |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|--------------------|-------------|
| heptan-2-one | Skin - Mild irritant | Rabbit | - | 24 hours 14 mg | - |
| pentane-2,4-dione | Eyes - Severe irritant | Rabbit | - | 20 mg | - |
| | Skin - Mild irritant | Rabbit | - | 488 mg | - |
| | Skin - Mild irritant | Rabbit | - | 6 hours 11.2 MI I | - |
| | Skin - Moderate irritant | Rabbit | - | 48 hours 11.2 MI I | - |
| | Skin - Moderate irritant | Rabbit | - | 6 hours 33.6 | - |

SECTION 11: Toxicological information

| | | | | | |
|--|--------------------------|--------|---|--------------------------|---|
| butanone | Skin - Mild irritant | Rabbit | - | MI I 24 hours 14 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 402 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| n-butyl acetate | Eyes - Moderate irritant | Rabbit | - | 100 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| Solvent naphtha (petroleum), light arom. | Eyes - Mild irritant | Rabbit | - | 24 hours 100 microliters | - |

Conclusion/Summary : Not available.

Sensitization

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|------------|-------------------|---|
| heptan-2-one | Category 3 | Not applicable. | Narcotic effects |
| butanone | Category 3 | Not applicable. | Narcotic effects |
| n-butyl acetate | Category 3 | Not applicable. | Narcotic effects |
| Solvent naphtha (petroleum), light arom. | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

| Product/ingredient name | Result |
|--|--------------------------------|
| Hydrocarbons, terpene processing by-products | ASPIRATION HAZARD - Category 1 |
| Solvent naphtha (petroleum), light arom. | ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact :
Inhalation :
Skin contact :
Ingestion :

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact :
Inhalation :

SECTION 11: Toxicological information

Skin contact :
Ingestion :

Delayed and immediate effects and also 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 :
Carcinogenicity :
Mutagenicity :
Teratogenicity :
Developmental effects :
Fertility effects :

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

No additional information.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

| Product/ingredient name | Result | Species | Exposure |
|-----------------------------------|--------------------------------------|--|----------|
| heptan-2-one pentane-2,4-dione | Acute LC50 131000 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| | Acute EC50 75000 µg/l Fresh water | Crustaceans - Ceriodaphnia reticulata - Larvae | 48 hours |
| | Acute EC50 75000 µg/l Fresh water | Daphnia - Daphnia magna - Larvae | 48 hours |
| | Acute EC50 75000 µg/l Fresh water | Daphnia - Daphnia pulex - Larvae | 48 hours |
| | Acute LC50 35400 µl/L Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 47600 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 74300 µg/l Fresh water | Fish - Lepomis macrochirus | 96 hours |
| | Acute LC50 66900 µg/l Fresh water | Fish - Lepomis macrochirus | 96 hours |
| | Acute LC50 60100 µg/l Fresh water | Fish - Lepomis macrochirus | 96 hours |
| | Acute LC50 71600 µg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| butanone | Acute LC50 71700 µg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| | Acute EC50 >500000 µg/l Marine water | Algae - Skeletonema costatum | 96 hours |

SECTION 12: Ecological information

| | | | |
|-----------------|-------------------------------------|---|----------|
| n-butyl acetate | Acute EC50 >500 mg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours |
| | Acute EC50 5091000 µg/l Fresh water | Daphnia - Daphnia magna - Larvae | 48 hours |
| | Acute LC50 3220000 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| | Acute LC50 5600 ppm Fresh water | Fish - Gambusia affinis - Adult | 96 hours |
| | Acute LC50 32 mg/l Marine water | Crustaceans - Artemia salina | 48 hours |
| | Acute LC50 100000 µg/l Fresh water | Fish - Lepomis macrochirus | 96 hours |
| | Acute LC50 18000 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| | Acute LC50 185000 µg/l Marine water | Fish - Menidia beryllina | 96 hours |
| | Acute LC50 62000 µg/l Fresh water | Fish - Danio rerio | 96 hours |

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| Solvent naphtha (petroleum), light arom. | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|------------|-----------|
| heptan-2-one | 2.26 | - | low |
| pentane-2,4-dione | 0.68 | - | low |
| butanone | 0.3 | - | low |
| n-butyl acetate | 2.3 | - | low |
| 2-methoxy-1-methylethyl acetate | 1.2 | - | low |
| Solvent naphtha (petroleum), light arom. | - | 10 to 2500 | high |
| butyl glycollate | 0.38 | - | 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

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.

12.6 Endocrine disrupting properties

Not available.

12.7 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 minimized 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** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.
- Disposal considerations** : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European waste catalogue (EWC)




The European Waste Catalogue classification of this product, when disposed of as waste, is:

| Waste code | Waste designation |
|---------------|---|
| EWC 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances |

Packaging

- Methods of disposal** : 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.
- Disposal considerations** : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.
- 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. Vapor 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | IMDG | IATA |
|---------------------------------|--|--|--|
| 14.1 UN number or ID number | UN1263 | UN1263 | UN1263 |
| 14.2 UN proper shipping name | PAINT | PAINT | PAINT |
| 14.3 Transport hazard class(es) | 3  | 3  | 3  |
| 14.4 Packing group | II | II | II |

SECTION 14: Transport information

| | | | |
|-------------------------------|-----|-----|-----|
| 14.5 Environmental hazards | No. | No. | No. |
|-------------------------------|-----|-----|-----|

Additional information

ADR/RID : **Special provisions** 640 (C)
Tunnel code (D/E)
IMDG : **Emergency schedules** F-E, _S-E_

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

Annex XIV
None of the components are listed.
Substances of very high concern
None of the components are listed.

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

Other EU regulations
Ozone depleting substances (1005/2009/EU)
Not listed.
Prior Informed Consent (PIC) (649/2012/EU)
Not listed.

Seveso Directive
This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

National regulations
Industrial use : The information contained in this safety data sheet does not constitute the user’s own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

15.2 Chemical Safety Assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information**CEPE code** : 1

 Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 vPvB = Very Persistent and Very Bioaccumulative

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

| Classification | Justification |
|--|---|
| Flam. Liq. 2, H225 Acute Tox. 4, H302 Skin Sens. 1, H317 STOT SE 3, H336 Aquatic Chronic 3, H412 | On basis of test data Calculation method Calculation method Calculation method Calculation method |

Full text of abbreviated H statements

| | |
|--|--|
| H225 H226 H302 H304 H311 H315 H317 H318 H319 H331 H332 H335 H336 H361f H361fd (oral) H400 H410 H411 H412 | Highly flammable liquid and vapor. Flammable liquid and vapor. Harmful if swallowed. May be fatal if swallowed and enters airways. Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye irritation. Toxic if inhaled. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of damaging fertility. Suspected of damaging fertility if swallowed. Suspected of damaging the unborn child if swallowed. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects. |
|--|--|

Full text of classifications [CLP/GHS]

| | |
|---|--|
| Acute Tox. 3, H311 Acute Tox. 3, H331 Acute Tox. 4, H302 Acute Tox. 4, H332 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Aquatic Chronic 2, H411 Aquatic Chronic 3, H412 Asp. Tox. 1, H304 EUH066 Eye Dam. 1, H318 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Flam. Liq. 3, H226 Repr. 2, H361f Repr. 2, H361fd (oral) | ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3 ASPIRATION HAZARD - Category 1 Repeated exposure may cause skin dryness or cracking. SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Fertility and Unborn child) (oral) - |
|---|--|

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| SECTION 16: Other information | |
|---|---|
| Skin Irrit. 2, H315 Skin Sens. 1, H317 Skin Sens. 1A, H317 Skin Sens. 1B, H317 STOT SE 3, H335 STOT SE 3, H336 | Category 2 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1A SKIN SENSITIZATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |

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Notice to reader

FOR PROFESSIONAL USE ONLY
IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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