SAFETY DATA SHEET



Date of issue/Date of revision : 5 June 2024 Version : 1.05

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

1.1 Product identifier

Product name : Clean Vivid Ruby (Special Concentrate)

: P190-1005/E0.33 **Product code**

Product type : Liquid. Other means of : Not available.

identification

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

Product use : Industrial applications, Used by spraying.

Use of the substance/ : Coating.

mixture

Uses advised against : Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

PPG Industries (UK) Ltd. Needham Road, Stowmarket, Suffolk, IP14 2AD, UK Tel: +44 (0) 1449 773 338

PPG Industries Italia S.r.I., Via Comasina, 121, 20161 Milano, Italy Tel: +39 02 6404.1

e-mail address of person

responsible for this SDS

: Product.Stewardship.EMEA@ppg.com

1.4 Emergency telephone number

Supplier

- Company emergency telephone number: +44 (0) 1449 773 338 (0900-1600)

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 Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Carc. 2, H351 Repr. 2, H361d

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

Hazard pictograms







Signal word : Warning

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SECTION 2: Hazards identification

Hazard statements : Flammable liquid and vapour.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer.

Suspected of damaging the unborn child. Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention: Do not handle until all safety precautions have been read and understood. Wear

protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Avoid release to the environment. Avoid breathing vapour.

Response : Not applicable.
Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

P202, P280, P210, P273, P261, P501

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.

: 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

1907/2006, Annex XIII

: Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification | Type |
|-------------------------|---|-------------|---|---------|
| xylene | REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 | ≥10 - ≤16 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412 | [1] [2] |
| 5-methylhexan-2-one | REACH #: 01-2119472300-51 EC: 203-737-8 CAS: 110-12-3 Index: 606-026-00-4 | ≥5.0 - ≤10 | Flam. Liq. 3, H226 Acute Tox. 4, H332 Repr. 2, H361d (inhalation) | [1] [2] |
| 4-methylpentan-2-one | REACH#: | ≥1.0 - ≤6.5 | Flam. Liq. 2, H225 | [1] [2] |

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SECTION 3: Composition/information on ingredients

| SECTION 3: Compositio | n/information on i | ingredients | | |
|---|---|--------------|---|---------|
| | 01-2119473980-30 EC: 203-550-1 CAS: 108-10-1 Index: 606-004-00-4 | | Acute Tox. 4, H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 EUH066 | |
| n-butyl acetate | REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1 | ≥1.0 - ≤5.0 | Flam. Liq. 3, H226 STOT SE 3, H336 EUH066 | [1] [2] |
| 2-butoxyethyl acetate | REACH #: 01-2119475112-47 EC: 203-933-3 CAS: 112-07-2 Index: 607-038-00-2 | ≥1.0 - ≤5.0 | Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 | [1] [2] |
| Hydrocarbons, C9, aromatics < 0.1% cumene | REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6 | ≥1.0 - ≤3.5 | Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066 | [1] |
| ethylbenzene | REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4 | ≥1.0 - ≤5.0 | Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412 | [1] [2] |
| heptan-2-one | REACH #: 01-2119902391-49 EC: 203-767-1 CAS: 110-43-0 Index: 606-024-00-3 | ≥0.30 - ≤2.3 | Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332 STOT SE 3, H336 | [1] [2] |
| acetone | REACH #: 01-2119471330-49 EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8 | ≤1.5 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 | [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 | ≤1.8 | Skin Sens. 1A, H317 Repr. 2, H361f Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) | [1] |
| Poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl) -4-hydroxyphenyl]-1-oxopropyl]- ω -hydroxy- | EC: 400-830-7 CAS: 104810-48-2 Index: 607-176-00-3 | ≤1.7 | Skin Sens. 1B, H317 Aquatic Chronic 2, H411 | [1] |
| methacrylic acid, monoester with propane-1,2-diol | REACH #: 01-2119490226-37 EC: 248-666-3 CAS: 27813-02-1 | ≤0.30 | Eye Irrit. 2, H319 Skin Sens. 1, H317 | [1] |
| | | | See Section 16 for the full text of the H statements declared above. | |

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.

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SECTION 3: Composition/information on ingredients

Xylene: Several REACH registrations cover the REACH registered substance with xylene isomers, ethylbenzene (and toluene). The other REACH Registrations include: 01-2119555267-33 reaction mass of ethylbenzene and m-xylene and p-xylene, 01-2119486136-34 Aromatic hydrocarbons, C8, 01-2119539452-40 reaction mass of ethylbenzene and xylene.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

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 recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show the 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. 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 irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes skin irritation. Defatting to the skin. 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 or irritation watering redness

Inhalation : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

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SECTION 4: First aid measures

: Treat symptomatically. Contact poison treatment specialist immediately if large Notes to physician

quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Flammable liquid and vapour. 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

5.3 Advice for firefighters

Special protective actions for fire-fighters

: 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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

: Avoid dispersal of spilt 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 material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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SECTION 6: Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour 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 between the following temperatures: 0 to 34°C (32 to 93.2°F). 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 oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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).

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| xylene | EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-,p-or mixed isomers] Absorbed through skin. |
| | STEL: 441 mg/m³ 15 minutes. |
| | STEL: 100 ppm 15 minutes. |
| | TWA: 220 mg/m³ 8 hours. |
| | TWA: 50 ppm 8 hours. |
| 5-methylhexan-2-one | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| | through skin. |
| | STEL: 475 mg/m³ 15 minutes. |
| | STEL: 100 ppm 15 minutes. |
| | TWA: 95 mg/m³ 8 hours. |
| | TWA: 20 ppm 8 hours. |
| 4-methylpentan-2-one | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| | through skin. |
| | STEL: 416 mg/m³ 15 minutes. |
| | STEL: 100 ppm 15 minutes. TWA: 208 mg/m³ 8 hours. |
| | TWA: 200 filg/fil ⁻ 8 flours. |
| n-butyl acetate | EH40/2005 WELs (United Kingdom (UK), 1/2020). |
| n-butyl acetate | STEL: 966 mg/m³ 15 minutes. |
| | STEL: 200 ppm 15 minutes. |
| | TWA: 724 mg/m³ 8 hours. |
| | TWA: 150 ppm 8 hours. |
| 2-butoxyethyl acetate | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| , , | through skin. |
| | STEL: 50 ppm 15 minutes. |
| | TWA: 20 ppm 8 hours. |
| | STEL: 332 mg/m³ 15 minutes. |
| | TWA: 133 mg/m³ 8 hours. |
| ethylbenzene | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| | through skin. |
| | STEL: 552 mg/m³ 15 minutes. |
| | STEL: 125 ppm 15 minutes. |
| | TWA: 441 mg/m³ 8 hours. |
| | TWA: 100 ppm 8 hours. |
| heptan-2-one | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| | through skin. |
| | STEL: 475 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. |
| | TWA: 237 mg/m³ 8 hours. |
| | TWA: 257 mg/m 6 mours. |
| acetone | EH40/2005 WELs (United Kingdom (UK), 1/2020). |
| 400.0110 | STEL: 3620 mg/m³ 15 minutes. |
| | STEL: 1500 ppm 15 minutes. |
| | TWA: 1210 mg/m ³ 8 hours. |
| | TWA: 500 ppm 8 hours. |

Biological exposure indices

| Product/ingredient name | Exposure indices | | |
|-------------------------|---|--|--|
| xylene | XYLENES | | |
| 4-methylpentan-2-one | 4-METHYLPENTAN-2-ONE / METHYL ISOBUTYL KETONE | | |

| English (GB) | United Kingdom (UK) | 7/ |
|----------------|---------------------|----|
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SECTION 8: Exposure controls/personal protection

procedures

Recommended monitoring: 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 | Туре | Exposure | Value | Population | Effects |
|------------------------------|--------------|---|------------------------------------|---------------------------------------|----------------------|
| x ylene | DNEL | Long term Oral | 5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 65.3 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 65.3 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 125 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 212 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 221 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 221 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 260 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 260 mg/m³ | General population | Systemic |
| | DNEL | Short term Inhalation | 442 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 442 mg/m³ | Workers | Systemic |
| 5-methylhexan-2-one | DNEL | Long term Oral | 5.12 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 5.12 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 14.2 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 17.8125 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 100.25 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 146.5 mg/m³ | General population | Systemic |
| | DNEL | Short term Inhalation | 196.3 mg/m³ | Workers | Systemic |
| 4-methylpentan-2-one | DNEL | Long term Dermal | 4.2 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 11.8 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 14.7 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 14.7 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 83 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 83 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 155.2 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 155.2 mg/m³ | General population | Systemic |
| | DNEL | Short term Inhalation | 208 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 208 mg/m³ | Workers | Systemic |
| 1 | DNEL | Long term Oral | 4.2 mg/kg bw/day | General population | Systemic |
| n-butyl acetate | DNEL | Long term Inhalation | 300 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 11 mg/m³ | 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/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 35.7 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 48 mg/m³ | Workers | Systemic |
| | DNEL DNEL | Short term Inhalation Short term Inhalation | 300 mg/m ³ | General population | Local Systemic |
| | DNEL | | 300 mg/m ³ | General population | • |
| | DNEL | Long term Inhalation Short term Inhalation | 300 mg/m³ 600 mg/m³ | Workers Workers | Local Local |
| | DNEL | Short term Inhalation | · · | Workers | |
| 2 butovivotbyl acetate | DNEL | Long term Inhalation | 600 mg/m ³ | | Systemic |
| 2-butoxyethyl acetate | DNEL | Long term Inhalation | 80 mg/m³ 133 mg/m³ | General population | Systemic |
| | DNEL | · · | · · | Workers | Systemic |
| | DNEL | Short term Inhalation Long term Oral | 200 mg/m³ 8.6 mg/kg bw/day | General population | Local Systemic |
| | DNEL | Short term Oral | | General population | |
| | DNEL | Short term Dermal | 36 mg/kg bw/day 72 mg/kg bw/day | General population General population | Systemic Systemic |
| | DNEL | | 102 mg/kg bw/day | General population | - |
| | DNEL | Long term Dermal Short term Dermal | 120 mg/kg bw/day | Workers | Systemic Systemic |
| | DNEL | Long term Dermal | 169 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 333 mg/m ³ | Workers | Local |
| Hydrocarbons, C9, aromatics | DNEL | Long term Dermal | 25 mg/kg bw/day | Workers | Systemic |
| Trydrocarbons, Os, aromatics | PINEL | Long tomi Demia | 20 mg/ng bw/day | VVOIRGIS | Systerino |

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SECTION 8: Exposure controls/personal protection

| DEG HON O: Exposure | | . 0.0, po. 00.1a. p. 0 | | | |
|---|------|------------------------|--------------------------|--------------------------------------|----------|
| < 0.1% cumene | | | | | |
| | DNEL | Long term Inhalation | 150 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 11 mg/kg | General population | Systemic |
| | DNEL | Long term Oral | 11 mg/kg | General population | Systemic |
| | DNEL | Long term Inhalation | 32 mg/m³ | General population | Systemic |
| ethylbenzene | DMEL | Long term Inhalation | 442 mg/m³ | Workers | Local |
| | DMEL | Short term Inhalation | 884 mg/m³ | Workers | Systemic |
| | DNEL | Long term Oral | 1.6 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 15 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 77 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 180 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 293 mg/m ³ | Workers | Local |
| heptan-2-one | 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/m³ | Workers | Systemic |
| acetone | DNEL | Long term Oral | 62 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 62 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 186 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 200 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 1210 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 2420 mg/m³ | Workers | Local |
| Poly(oxy-1,2-ethanediyl), α-[3- [3-(2H-benzotriazol-2-yl)-5- (1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropyl]-ω-hydroxy- | | Long term Inhalation | 0.35 mg/m³ | Workers | Systemic |
| 1 oxopropyij w riyuroxy | DNEL | Long term Dermal | 0.5 mg/kg | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.085 mg/m³ | General population [Consumers] | Systemic |
| | DNEL | Long term Dermal | 0.25 mg/kg | General population [Consumers] | Systemic |
| | DNEL | Long term Oral | 0.025 mg/kg | General population [Consumers] | Systemic |
| | DNEL | Long term Oral | 0.025 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.025 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 0.085 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 0.25 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.35 mg/m ³ | Workers | Systemic |
| methacrylic acid, monoester with propane-1,2-diol | 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 Dermal | 4.2 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 4.35 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 14.7 mg/m³ | Workers | Systemic |

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail | |
|-------------------------|---------------------------|-----------------|--------------------|--|
| kylene | Fresh water | 0.327 mg/l | - | |
| • | Marine water | 0.327 mg/l | - | |
| | Sewage Treatment Plant | 6.58 mg/l | - | |
| | Fresh water sediment | 12.46 mg/kg dwt | - | |
| | Marine water sediment | 12.46 mg/kg dwt | - | |
| | Soil | 2.31 mg/kg | - | |
| 5-methylhexan-2-one | Fresh water | 0.1 mg/l | Assessment Factors | |
| • | Marine water | 0.01 mg/l | Assessment Factors | |
| | Sewage Treatment Plant | 100 mg/l | Assessment Factors | |

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SECTION 8: Exposure controls/personal protection

| SECTION 6. Exposure controls/p | croonar protection | • | |
|---|------------------------|-----------------|--------------------------|
| | Fresh water sediment | 1.12 mg/kg dwt | Equilibrium Partitioning |
| | Marine water sediment | 0.112 mg/kg dwt | Equilibrium Partitioning |
| | Soil | 0.166 mg/kg dwt | Equilibrium Partitioning |
| 4-methylpentan-2-one | Fresh water | 0.6 mg/l | Assessment Factors |
| 4-metrypentan-2-one | Marine water | 0.06 mg/l | Assessment Factors |
| | | | |
| | Sewage Treatment Plant | | Assessment Factors |
| | Fresh water sediment | 8.27 mg/kg | Equilibrium Partitioning |
| | Marine water sediment | 0.83 mg/kg | Equilibrium Partitioning |
| | Soil | 1.3 mg/kg | Equilibrium Partitioning |
| n-butyl acetate | Fresh water | 0.18 mg/l | - |
| | Marine water | 0.018 mg/l | - |
| | Fresh water sediment | 0.981 mg/kg | - |
| | Marine water sediment | 0.0981 mg/kg | - |
| | Sewage Treatment Plant | 35.6 mg/l | - |
| | Soil | 0.0903 mg/kg | - |
| 2-butoxyethyl acetate | Fresh water | 0.304 mg/l | - |
| | Marine water | 0.0304 mg/l | _ |
| | Fresh water sediment | 2.03 mg/kg dwt | _ |
| | Marine water sediment | 0.203 mg/kg dwt | _ |
| | Soil | 0.42 mg/kg dwt | _ |
| | Sewage Treatment Plant | 90 mg/l | |
| ethylbenzene | Fresh water | 0.1 mg/l | Assessment Factors |
| etryiberizerie | Marine water | 0.01 mg/l | Assessment Factors |
| | | | |
| | Sewage Treatment Plant | | Assessment Factors |
| | Fresh water sediment | 13.7 mg/kg dwt | Equilibrium Partitioning |
| | Marine water sediment | 1.37 mg/kg dwt | Equilibrium Partitioning |
| | Soil | 2.68 mg/kg dwt | Equilibrium Partitioning |
| | Secondary Poisoning | 20 mg/kg | - |
| heptan-2-one | Fresh water | 0.0982 mg/l | Assessment Factors |
| | Marine water | 0.00982 mg/l | Assessment Factors |
| | Fresh water sediment | 1.89 mg/kg | Equilibrium Partitioning |
| | Marine water sediment | 0.189 mg/kg | Equilibrium Partitioning |
| | Sewage Treatment Plant | 12.5 mg/l | Assessment Factors |
| | Soil | 0.321 mg/kg | Equilibrium Partitioning |
| acetone | Fresh water | 10.6 mg/l | Assessment Factors |
| | Marine water | 1.06 mg/l | Assessment Factors |
| | Sewage Treatment Plant | 100 mg/l | Assessment Factors |
| | Fresh water sediment | 30.4 mg/kg dwt | Equilibrium Partitioning |
| | Marine water sediment | 3.04 mg/kg dwt | Equilibrium Partitioning |
| | Soil | 29.5 mg/kg dwt | Equilibrium Partitioning |
| Poly(oxy 1.2 othonodiyl) ~ [2 [2 (2]] | Fresh water | 0.0023 mg/l | Equilibrium Farutioning |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H- | Fiesii watei | 0.0023 Hig/I | - |
| benzotriazol-2-yl)-5-(1,1-dimethylethyl) | | | |
| -4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy- | Maning works | 0.00000 | |
| | Marine water | 0.00023 mg/l | - |
| | Sewage Treatment Plant | | - |
| | Fresh water sediment | 3.06 mg/kg dwt | - |
| | Marine water sediment | 0.306 mg/kg dwt | - |
| | Soil | 2 mg/kg | - |

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

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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
Skin protection
Hand protection

: Chemical splash goggles.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. 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.

Gloves

: **F**or prolonged or repeated handling, use the following type of gloves:

Not recommended: natural rubber (latex)

Recommended: polyvinyl alcohol (PVA), Viton®, butyl rubber

May be used: nitrile rubber

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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

: 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 workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3

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

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 : Colourless.
Odour : Characteristic.
Odour threshold : Not available.

Melting point/freezing point :

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SECTION 9: Physical and chemical properties

May start to solidify at the following temperature: <-20°C (<-4°F) This is based on data for the following ingredient: heptan-2-one. Weighted average: -84.48°C

(-120.1°F)

Initial boiling point and

boiling range

: >37.78°C (>100°F)

Flammability (solid, gas)

Upper/lower flammability or

explosive limits

: Greatest known range: Lower: 2.2% Upper: 13% (acetone)

Flash point : Closed cup: 23°C (73.4°F)

Auto-ignition temperature :

| Ingredient name | °C | °F | Method |
|---|------------|------------|--------|
| Hydrocarbons, C9, aromatics < 0.1% cumene | 280 to 470 | 536 to 878 | |

pH : Not applicable.

Not applicable. insoluble in water.

Viscosity : Kinematic (40°C): >21 mm²/s

Solubility(ies) :

| Media | Result |
|------------|-------------|
| cold water | Not soluble |

Miscible with water : No.

Partition coefficient: n-octanol/ : Not applicable.

water

Vapour pressure :

| | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | re at 50°C |
|-----------------|-------------------------|-----|--------|-------------------------|-----|------------|
| Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |
| acetone | 180.01463 | 24 | | | | |

Relative density : 0.98

Vapour density : Highest known value: 5.5 (Air = 1) (2-butoxyethyl acetate). Weighted average:

3.86 (Air = 1)

Explosive properties : The product itself is not explosive, but the formation of an explosible mixture of

vapour or dust with air is possible.

Oxidising properties

Particle characteristics

: Product does not present an oxidizing hazard.

Median particle size : Not applicable.

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

Refer to protective measures listed in sections 7 and 8.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidising agents, strong alkalis, strong acids.

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SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides

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SECTION 11: Toxicological information

11.1 Information on toxicological effects <u>Acute toxicity</u>

| Product/ingredient name | Result | Species | Dose | Exposure |
|------------------------------|------------------------|----------------|-------------------------|----------|
| x ylene | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| | LD50 Oral | Rat | 4.3 g/kg | _ |
| 5-methylhexan-2-one | LC50 Inhalation Gas. | Rat | 5000 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 8.14 g/kg | _ |
| | LD50 Oral | Rat | 5657 mg/kg | _ |
| 4-methylpentan-2-one | LC50 Inhalation Vapour | Rat | 11 mg/l | 4 hours |
| '. | LD50 Dermal | Rabbit | >5000 mg/kg | _ |
| | LD50 Oral | Rat | 2.08 g/kg | - |
| n-butyl acetate | LC50 Inhalation Vapour | Rat | >21.1 mg/l | 4 hours |
| | LC50 Inhalation Vapour | Rat | 2000 ppm | 4 hours |
| | LD50 Dermal | Rabbit | >17600 mg/kg | - |
| | LD50 Oral | Rat | 10.768 g/kg | _ |
| 2-butoxyethyl acetate | LD50 Dermal | Rabbit | 1500 mg/kg | - |
| | LD50 Oral | Rat | 1880 mg/kg | _ |
| Hydrocarbons, C9, | LD50 Dermal | Rabbit - Male, | >2000 mg/kg | _ |
| aromatics < 0.1% cumene | | Female | | |
| | LD50 Oral | Rat | 8400 mg/kg | _ |
| ethylbenzene | LC50 Inhalation Vapour | Rat | 17.8 mg/l | 4 hours |
| Stryiborizorio | LD50 Dermal | Rabbit | 17.8 g/kg | - |
| | LD50 Oral | Rat | 3.5 g/kg | _ |
| heptan-2-one | LC50 Inhalation Vapour | Rat | 16.7 mg/l | 4 hours |
| Tioptair 2 one | LD50 Dermal | Rabbit | 10.206 g/kg | - |
| | LD50 Oral | Rat | 1.6 g/kg | _ |
| acetone | LC50 Inhalation Vapour | Rat | 76000 mg/m ³ | 4 hours |
| doctorio | LD50 Dermal | Rabbit | 15.8 g/kg | - |
| | LD50 Oral | Rat | 5800 mg/kg | |
| Reaction mass of bis | LD50 Dermal | Rat | >3170 mg/kg | |
| (1,2,2,6,6-pentamethyl- | LD30 Definal | Ital | 20170 mg/kg | |
| 4-piperidyl) sebacate and | | | | |
| methyl | | | | |
| 1,2,2,6,6-pentamethyl- | | | | |
| 4-piperidyl sebacate | | | | |
| 4-piperidyi sebacate | LD50 Oral | Rat - Male, | 3230 mg/kg | |
| | LD30 Oral | Female | 3230 mg/kg | |
| Poly(oxy-1,2-ethanediyl), α- | LD50 Dermal | Rat - Male, | >2000 mg/kg | |
| [3-[3-(2H-benzotriazol-2-yl) | LD30 Definal | Female | - 2000 mg/kg | |
| -5-(1,1-dimethylethyl) | | Ciliale | | |
| -4-hydroxyphenyl] | | | | |
| -1-oxopropyl]-ω-hydroxy- | | | | |
| - 1-0x0pi0pyij-w-iiydi0xy- | LD50 Oral | Rat - Male, | >5000 mg/kg | _ |
| | LD00 Orai | Female | - Jood Hig/kg | = |
| methacrylic acid, monoester | LD50 Oral | Rat | 11200 mg/kg | |
| with propane-1,2-diol | LDJU Olai | ivat | 1 1200 Hig/kg | - |
| with proparie-1,2-dioi | | | | |

Conclusion/Summary
Acute toxicity estimates

: There are no data available on the mixture itself.

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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) |
|--|------------------|-------------------|--------------------------------|-----------------------------------|--|
| Clean Vivid Ruby (Special Concentrate) | 30562.4 | 8948.8 | 57826.2 | 40.9 | N/A |
| xylene | 4300 | 1700 | N/A | 11 | N/A |
| 5-methylhexan-2-one | 5657 | 8140 | 5000 | N/A | N/A |
| 4-methylpentan-2-one | 2080 | N/A | N/A | 11 | N/A |
| n-butyl acetate | 10768 | N/A | N/A | N/A | N/A |
| 2-butoxyethyl acetate | 1880 | 1500 | N/A | 11 | N/A |
| Hydrocarbons, C9, aromatics < 0.1% cumene | 8400 | N/A | N/A | N/A | N/A |
| ethylbenzene | 3500 | 17800 | N/A | 17.8 | N/A |
| heptan-2-one | 1600 | 10206 | N/A | 16.7 | N/A |
| acetone | 5800 | 15800 | N/A | 76 | 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 |
| methacrylic acid, monoester with propane-1,2-diol | 11200 | N/A | N/A | N/A | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|--------------|-------------|
| xylene | Skin - Moderate irritant | Rabbit | - | 24 hours 500 | - |
| | | | | mg | |

Conclusion/Summary: Not available.

Skin
Eyes
There are no data available on the mixture itself.
Respiratory
There are no data available on the mixture itself.
There are no data available on the mixture itself.

Sensitisation

Conclusion/Summary

Skin: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary

Carcinogenicity

: There are no data available on the mixture itself.

Conclusion/Summary

: There are no data available on the mixture itself.

Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Developmental toxin | Species | Dose | Exposure |
|-------------------------|-------------------|-----------|------------------------|---------|-------------------------|----------|
| 5-methylhexan-2-one | - | - | Equivocal | | Inhalation: 1250 ppm | - |

Conclusion/Summary

: There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|---|------------|-------------------|------------------------------|
| xylene | Category 3 | - | Respiratory tract irritation |
| 4-methylpentan-2-one | Category 3 | - | Narcotic effects |
| n-butyl acetate | Category 3 | - | Narcotic effects |
| Hydrocarbons, C9, aromatics < 0.1% cumene | Category 3 | - | Respiratory tract irritation |
| | Category 3 | | Narcotic effects |
| heptan-2-one | Category 3 | - | Narcotic effects |

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SECTION 11: Toxicological information

acetone Category 3 - 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 |
|---|--|
| xylene Hydrocarbons, C9, aromatics < 0.1% cumene ethylbenzene | ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 |

Information on likely routes

of exposure

Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

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

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

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

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

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SECTION 11: Toxicological information

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 : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

Mutagenicity: No known significant effects or critical hazards.

Reproductive toxicity: Suspected of damaging the unborn child.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---------------------|
| 万 -methylhexan-2-one | Acute LC50 159 mg/l | Fish | 96 hours |
| 4-methylpentan-2-one | Acute LC50 >179 mg/l | Fish | 96 hours |
| n-butyl acetate | Acute LC50 18 mg/l | Fish | 96 hours |
| 2-butoxyethyl acetate | Acute LC50 28 mg/l | Fish | 96 hours |
| Hydrocarbons, C9, aromatics < 0.1% cumene | LC50 9.2 mg/l | Fish | 96 hours |
| ethylbenzene | Acute EC50 1.8 mg/l Fresh water | Daphnia | 48 hours |
| | Chronic NOEC 1 mg/l Fresh water | Daphnia - Ceriodaphnia dubia | - |
| heptan-2-one | Acute LC50 131 mg/l | Fish | 96 hours |
| acetone | Acute LC50 4.42589 ml/L Marine water | Crustaceans - Calanoid copepod - <i>Acartia tonsa</i> - Copepodid | 48 hours |
| | Acute LC50 5540 mg/l | Fish | 96 hours |
| Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | EC50 1.68 mg/l | Algae | 72 hours |
| Poly(oxy-1,2-ethanediyl), α- [3-[3-(2H-benzotriazol-2-yl) -5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropyl]-ω-hydroxy- | LC50 0.9 mg/l Chronic NOEC 0.78 mg/l | Fish Daphnia | 96 hours 21 days |

Conclusion/Summary: Not available.

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|-----------------------|----------------------------|------|----------|
| 5-methylhexan-2-one | OECD 301D | 67 % - Readily - 28 days | - | - |
| 4-methylpentan-2-one | OECD 301F | 83 % - Readily - 28 days | - | - |
| n-butyl acetate | TEPA and OECD 301D | 83 % - Readily - 28 days | - | - |
| 2-butoxyethyl acetate | OECD 301A | 97 % - Readily - 7 days | - | - |
| Hydrocarbons, C9, aromatics < 0.1% cumene | - | 78 % - 28 days | - | - |
| ethylbenzene | - | 79 % - Readily - 10 days | - | - |
| heptan-2-one | OECD 310 | 69 % - Readily - 28 days | - | - |
| acetone | - | 90.9 % - Readily - 28 days | - | - |
| Poly(oxy-1,2-ethanediyl), α- | OECD 301B | 12 % - 28 days | - | - |
| [3-[3-(2H-benzotriazol-2-yl) | Ready | | | |
| -5-(1,1-dimethylethyl) | Biodegradability - | | | |
| -4-hydroxyphenyl] | CO2 Evolution | | | |

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SECTION 12: Ecological information

-1-oxopropyl]-ω-hydroxy- Test

Conclusion/Summary: Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|------------------------------|-------------------|------------|------------------|
| kylene | - | - | Readily |
| 5-methylhexan-2-one | - | - | Readily |
| 4-methylpentan-2-one | - | - | Readily |
| n-butyl acetate | - | - | Readily |
| 2-butoxyethyl acetate | - | - | Readily |
| Hydrocarbons, C9, | - | - | Readily |
| aromatics < 0.1% cumene | | | |
| ethylbenzene | - | - | Readily |
| heptan-2-one | - | - | Readily |
| acetone | - | - | Readily |
| Poly(oxy-1,2-ethanediyl), α- | - | - | Not readily |
| [3-[3-(2H-benzotriazol-2-yl) | | | |
| -5-(1,1-dimethylethyl) | | | |
| -4-hydroxyphenyl] | | | |
| -1-oxopropyl]-ω-hydroxy- | | | |

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|------------------------------|------------|-------------|-----------|
| x ylene | 3.12 | 7.4 to 18.5 | Low |
| 5-methylhexan-2-one | 1.88 | - | Low |
| 4-methylpentan-2-one | 1.9 | - | Low |
| n-butyl acetate | 2.3 | - | Low |
| 2-butoxyethyl acetate | 1.51 | - | Low |
| Hydrocarbons, C9, | 3.7 to 4.5 | 10 to 2500 | High |
| aromatics < 0.1% cumene | | | |
| ethylbenzene | 3.6 | 79.43 | Low |
| heptan-2-one | 2.26 | - | Low |
| acetone | -0.23 | 3 | Low |
| Poly(oxy-1,2-ethanediyl), α- | 5.9 | - | High |
| [3-[3-(2H-benzotriazol-2-yl) | | | |
| -5-(1,1-dimethylethyl) | | | |
| -4-hydroxyphenyl] | | | |
| -1-oxopropyl]-ω-hydroxy- | | | |
| methacrylic acid, monoester | 0.97 | - | Low |
| with propane-1,2-diol | | | |

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.

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SECTION 13: Disposal considerations

Yes.

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.

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Hazardous waste

Waste catalogue

| Waste code | Waste designation |
|------------|---|
| 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 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 | |
|-------------------|-----------------|--------------------|
| Container | 15 01 04 | metallic packaging |

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. |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. | Not applicable. |

Additional information

ADR/RID : None identified.

Tunnel code : (D/E

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

vessels.

IMDG : None identified.IATA : None identified.

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SECTION 14: Transport information

user

14.6 Special precautions for : 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 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.

Ozone depleting substances

Not listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P₅c

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

Procedure used to derive the classification

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SECTION 16: Other information

| Justification |
|-----------------------|
| On basis of test data |
| Calculation method |
| |

Full text of abbreviated H statements

| H225 | Highly flammable liquid and vapour. |
|--------|--|
| H226 | Flammable liquid and vapour. |
| 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. |
| 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. |
| H361d | Suspected of damaging the unborn child. |
| H361f | Suspected of damaging fertility. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| 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 |
| Carc. 2 | CARCINOGENICITY - Category 2 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| Repr. 2 | REPRODUCTIVE TOXICITY - Category 2 |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| Skin Sens. 1A | SKIN SENSITISATION - Category 1A |
| Skin Sens. 1B | SKIN SENSITISATION - Category 1B |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

<u>History</u>

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revision

Date of previous issue : 14 March 2024

Prepared by : EHS Version : 1.05

Disclaimer

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SECTION 16: Other information

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

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