# SAFETY DATA SHEET

8-409 HS Semi Gloss Clear Coat

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

### 1.1 Product identifier

**Product name** : 8-409 HS Semi Gloss Clear Coat

**Product code** : 8-409

**Product description** : Not available.

**Product type** : Liquid.

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

| Identified uses |
| --- |
| Professional spray painting, near-industrial setting<br>Use in coatings - Clearcoat |

**Uses advised against**

Not applicable.

### 1.3 Details of the supplier of the safety data sheet

Valspar b.v.
Zuiveringweg 89
8243 PE Lelystad
The Netherlands
tel: +31 (0)320 292200

**e-mail address of person responsible for this SDS** : msds@valspar.com

**National contact**

Sherwin-Williams UK Limited
Avenue One Station Lane, Witney, United Kingdom
Oxfordshire OX28 4XR

### 1.4 Emergency telephone number

**National advisory body/Poison Centre**

**Telephone number** : UK: 0-800-014-8126
CALL: +(44)-870-8200418 (Hours of operation - 24 hours)

**Supplier**

**Telephone number** : Call: +31 (0)320 292200 (8:30AM - 5PM)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to UK CLP/GHS**

Flam. Liq. 3, H226
Skin Sens. 1, H317
STOT SE 3, H336

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** :

## SECTION 2: Hazards identification

**Signal word** : Warning

**Hazard statements** : Flammable liquid and vapour.
May cause an allergic skin reaction.
May cause drowsiness or dizziness.

**Precautionary statements**

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

**Response** : IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.

**Storage** : Store in a well-ventilated place. Keep container tightly closed.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**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 | % | Classification | Type |
|---|---|---|---|---|
| n-butyl acetate | REACH #: 01-2119485493-29<br>EC: 204-658-1<br>CAS: 123-86-4<br>Index: 607-025-00-1 | ≥25 - ≤50 | Flam. Liq. 3, H226<br>STOT SE 3, H336<br>EUH066 | [1] [2] |
| heptan-2-one | REACH #: 01-2119902391-49<br>EC: 203-767-1<br>CAS: 110-43-0<br>Index: 606-024-00-3 | ≤10 | Flam. Liq. 3, H226<br>Acute Tox. 4, H302<br>Acute Tox. 4, H332 | [1] [2] |
| 2-(2-butoxyethoxy)ethanol | REACH #: 01-2119475104-44<br>EC: 203-961-6<br>CAS: 112-34-5<br>Index: 603-096-00-8 | ≤3 | Eye Irrit. 2, H319 | [1] [2] |
| 1,2,4-trimethylbenzene | REACH #: 01-2119472135-42<br>EC: 202-436-9<br>CAS: 95-63-6<br>Index: 601-043-00-3 | <1 | Flam. Liq. 3, H226<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335 | [1] [2] |

## SECTION 3: Composition/information on ingredients

| | | | | |
|---|---|---|---|---|
| | | | Aquatic Chronic 2, H411 | |
| xylene | REACH #: 01-2119488216-32<br>EC: 215-535-7<br>CAS: 1330-20-7<br>Index: 601-022-00-9 | <1 | Flam. Liq. 3, H226<br>Acute Tox. 4, H312<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315 | [1] [2] |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy- | REACH #: 01-0000015075-76<br>CAS: 104810-48-2 | <1 | Skin Sens. 1A, H317<br>Aquatic Chronic 2, H411 | [1] |
| 2-methoxy-1-methylethyl acetate | REACH #: 01-2119475791-29<br>EC: 203-603-9<br>CAS: 108-65-6<br>Index: 607-195-00-7 | <1 | Flam. Liq. 3, H226<br>STOT SE 3, H336 | [1] [2] |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]- | REACH #: 01-0000015075-76<br>CAS: 104810-47-1 | <1 | Skin Sens. 1A, H317<br>Aquatic Chronic 2, H411 | [1] |
| ethylbenzene | REACH #: 01-2119489370-35<br>EC: 202-849-4<br>CAS: 100-41-4<br>Index: 601-023-00-4 | ≤0.3 | Flam. Liq. 2, H225<br>Acute Tox. 4, H332<br>STOT RE 2, H373 (hearing organs)<br>Asp. Tox. 1, H304 | [1] [2] |
| dioctyltin dilaurate | REACH #: 01-2119979527-19<br>EC: 222-883-3<br>CAS: 3648-18-8<br>Index: 050-031-00-9 | <0.3 | Repr. 1B, H360D<br>STOT RE 1, H372 (immune system) | [1] [2] |
| cumene | EC: 202-704-5<br>CAS: 98-82-8<br>Index: 601-024-00-X | <0.1 | Flam. Liq. 3, H226<br>Carc. 1B, H350<br>STOT SE 3, H335<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 | [1] [2] |
| toluene | REACH #: 01-2119471310-51<br>EC: 203-625-9<br>CAS: 108-88-3<br>Index: 601-021-00-3 | ≤0.1 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>Repr. 2, H361d<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Asp. Tox. 1, H304 | [1] [2] |
| benzene | REACH #: 01-2119447106-44<br>EC: 200-753-7<br>CAS: 71-43-2<br>Index: 601-020-00-8 | <0.1 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Muta. 1B, H340<br>Carc. 1A, H350<br>STOT RE 1, H372<br>Asp. Tox. 1, H304<br>**See Section 16 for the full text of the H statements declared above.** | [1] [2] |

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

## SECTION 3: Composition/information on ingredients

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### 4.2 Most important symptoms and effects, both acute and delayed

**Over-exposure signs/symptoms**

**Eye contact** : No specific data.

**Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : No specific data.

### 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.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use dry chemical, $CO_2$, 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. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

**Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/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).

### 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.

**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.

## SECTION 6: Accidental release measures

**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 vapour or mist. 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 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.

**Seveso Directive - Reporting thresholds**

**Danger criteria**

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

### 7.3 Specific end use(s)

**Recommendations** : Not available.

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

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Occupational exposure limits**

| Product/ingredient name | Exposure limit values |
|---|---|
| n-butyl acetate | **EH40/2005 WELs (United Kingdom (UK), 1/2020).**<br>STEL: 966 mg/m³ 15 minutes.<br>STEL: 200 ppm 15 minutes.<br>TWA: 724 mg/m³ 8 hours.<br>TWA: 150 ppm 8 hours. |
| heptan-2-one | **EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.**<br>STEL: 475 mg/m³ 15 minutes.<br>STEL: 100 ppm 15 minutes. |

## SECTION 8: Exposure controls/personal protection

| | |
|---|---|
| | TWA: 237 mg/m³ 8 hours.<br>TWA: 50 ppm 8 hours. |
| 2-(2-butoxyethoxy)ethanol | **EH40/2005 WELs (United Kingdom (UK), 1/2020).**<br>TWA: 10 ppm 8 hours.<br>STEL: 15 ppm 15 minutes.<br>TWA: 67.5 mg/m³ 8 hours.<br>STEL: 101.2 mg/m³ 15 minutes. |
| 1,2,4-trimethylbenzene | **EH40/2005 WELs (United Kingdom (UK), 1/2020). [trimethylbenzenes, all isomers or mixtures]**<br>TWA: 125 mg/m³ 8 hours.<br>TWA: 25 ppm 8 hours. |
| xylene | **EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-, p- or mixed isomers] Absorbed through skin.**<br>STEL: 441 mg/m³, 0 times per shift, 15 minutes.<br>STEL: 100 ppm, 0 times per shift, 15 minutes.<br>TWA: 220 mg/m³, 0 times per shift, 8 hours.<br>TWA: 50 ppm, 0 times per shift, 8 hours. |
| 2-methoxy-1-methylethyl acetate | **EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.**<br>STEL: 548 mg/m³ 15 minutes.<br>TWA: 50 ppm 8 hours.<br>TWA: 274 mg/m³ 8 hours.<br>STEL: 100 ppm 15 minutes. |
| ethylbenzene | **EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.**<br>STEL: 552 mg/m³ 15 minutes.<br>STEL: 125 ppm 15 minutes.<br>TWA: 441 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours. |
| dioctyltin dilaurate | **EH40/2005 WELs (United Kingdom (UK), 1/2020). [tin compounds, organic, except cyhexatin (ISO) as Sn] Absorbed through skin.**<br>STEL: 0.2 mg/m³, (as Sn) 15 minutes.<br>TWA: 0.1 mg/m³, (as Sn) 8 hours. |
| cumene | **EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.**<br>STEL: 250 mg/m³ 15 minutes.<br>STEL: 50 ppm 15 minutes.<br>TWA: 125 mg/m³ 8 hours.<br>TWA: 25 ppm 8 hours. |
| toluene | **EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.**<br>STEL: 384 mg/m³ 15 minutes.<br>STEL: 100 ppm 15 minutes.<br>TWA: 191 mg/m³ 8 hours.<br>TWA: 50 ppm 8 hours. |
| benzene | **EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.**<br>TWA: 1 ppm 8 hours.<br>TWA: 3.25 mg/m³ 8 hours. |

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

**DNELs/DMELs**

## SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|---|---|---|---|---|---|
| n-butyl acetate | DNEL | Long term Inhalation | 35.7 mg/m³ | General population [Consumers] | Local |
| | DNEL | Short term Inhalation | 300 mg/m³ | General population [Consumers] | Local |
| | DNEL | Short term Dermal | 6 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Oral | 2 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Short term Oral | 2 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Long term Inhalation | 300 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 600 mg/m³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 300 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 600 mg/m³ | Workers | Local |
| | DNEL | Long term Dermal | 11 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Dermal | 11 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Oral | 2 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Oral | 2 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 3.4 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Dermal | 6 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 7 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Dermal | 11 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 12 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 35.7 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 48 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 300 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 300 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 300 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 600 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 600 mg/m³ | Workers | Systemic |
| 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/m³ | General population | Systemic |

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| | | | | | |
|---|---|---|---|---|---|
| | DNEL | Long term Inhalation | 394.25 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 1516 mg/m³ | Workers | Systemic |
| 2-(2-butoxyethoxy)ethanol | DNEL | Long term Oral | 6.25 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 67.5 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 101.2 mg/m³ | Workers | Local |
| 1,2,4-trimethylbenzene | DNEL | Long term Oral | 15 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 29.4 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 29.4 mg/m³ | General population | Systemic |
| | DNEL | Short term Inhalation | 100 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 100 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 16171 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 29.4 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 29.4 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 100 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 100 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 9512 mg/kg bw/day | General population | Systemic |
| xylene | DNEL | Short term Inhalation | 174 mg/m³ | General population [Consumers] | Local |
| | DNEL | Short term Inhalation | 174 mg/m³ | General population [Consumers] | Systemic |
| | DNEL | Long term Oral | 12.5 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 |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy- | DNEL | Long term Inhalation | 0.35 mg/m³ | Workers | Systemic |

## SECTION 8: Exposure controls/personal protection

| | | | | | |
|---|---|---|---|---|---|
| | DNEL | Long term Dermal | 0.5 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.085 mg/m³ | General population [Consumers] | Systemic |
| | DNEL | Long term Dermal | 0.25 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Long term Oral | 0.025 mg/kg bw/day | 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/m³ | Workers | Systemic |
| 2-methoxy-1-methylethyl acetate | DNEL | Long term Dermal | 796 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 33 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 33 mg/m³ | General population | Systemic |
| | DNEL | Long term Oral | 36 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 275 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 320 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 550 mg/m³ | Workers | Local |
| | DNEL | Long term Dermal | 796 mg/kg bw/day | Workers | Systemic |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]- | DNEL | Long term Inhalation | 0.35 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 0.5 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.085 mg/m³ | General population [Consumers] | Systemic |
| | DNEL | Long term Dermal | 0.25 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Long term Oral | 0.025 mg/kg bw/day | General population [Consumers] | 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 | 77 mg/m³ | Workers | Systemic |

## SECTION 8: Exposure controls/personal protection

| | | | | | |
|---|---|---|---|---|---|
| | | Inhalation | | | |
| | DNEL | Long term Dermal | 180 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 293 mg/m³ | Workers | Local |
| dioctyltin dilaurate | DNEL | Long term Oral | 0.0005 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 0.0009 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 0.0035 mg/m³ | Workers | Systemic |
| cumene | DNEL | Long term Dermal | 1.2 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 15.4 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 100 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 250 mg/m³ | Workers | Local |
| | DNEL | Long term Oral | 5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 16.6 mg/m³ | General population | Systemic |
| toluene | DNEL | Long term Oral | 8.13 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 56.5 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 56.5 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 192 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 192 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 226 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 226 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 226 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 384 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 384 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 384 mg/m³ | Workers | Systemic |
| benzene | DNEL | Long term Inhalation | 1.9 mg/m³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.14 mg/m³ | General population | Systemic |

**PNECs**

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|---|---|---|---|
| n-butyl acetate | Fresh water | 0.18 mg/l | - |
| | Marine | 0.018 mg/l | - |
| | Sewage Treatment Plant | 35.6 mg/l | - |
| | Fresh water sediment | 0.981 mg/kg dwt | - |
| | Marine water sediment | 0.0981 mg/kg dwt | - |
| | Soil | 0.0903 mg/kg dwt | - |
| heptan-2-one | Fresh water | 0.0982 mg/l | - |
| | Marine water | 0.00982 mg/l | - |
| | Sewage Treatment Plant | 12.5 mg/l | - |
| | Fresh water sediment | 1.89 mg/kg dwt | - |

## SECTION 8: Exposure controls/personal protection

| | | | |
|---|---|---|---|
| | Marine water sediment | 0.189 mg/kg dwt | - |
| | Soil | 0.321 mg/kg dwt | - |
| 2-(2-butoxyethoxy)ethanol | Fresh water | 1.1 mg/l | - |
| | Marine water | 0.11 mg/l | - |
| | Sewage Treatment Plant | 200 mg/l | - |
| | Fresh water sediment | 4.4 mg/kg dwt | - |
| | Marine water sediment | 0.44 mg/kg dwt | - |
| | Soil | 0.32 mg/kg dwt | - |
| | Secondary Poisoning | 56 mg/kg | - |
| 1,2,4-trimethylbenzene | Fresh water | 0.12 mg/l | - |
| | Marine water | 0.12 mg/l | - |
| | Sewage Treatment Plant | 2.41 mg/l | - |
| | Fresh water sediment | 13.56 mg/kg dwt | - |
| | Marine water sediment | 13.56 mg/kg dwt | - |
| | Soil | 2.34 mg/kg dwt | - |
| xylene | 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 dwt | - |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl) -4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy- | Fresh water | 0.0023 mg/l | - |
| | Marine water | 0.00023 mg/l | - |
| | Sewage Treatment Plant | 10 mg/l | - |
| | Fresh water sediment | 3.06 mg/kg dwt | - |
| | Marine water sediment | 0.306 mg/kg dwt | - |
| | Soil | 2 mg/kg dwt | - |
| 2-methoxy-1-methylethyl acetate | Fresh water | 0.635 mg/l | - |
| | Marine | 0.0635 mg/l | - |
| | Sewage Treatment Plant | 100 mg/l | - |
| | Fresh water sediment | 3.29 mg/kg dwt | - |
| | Marine water sediment | 0.329 mg/kg dwt | - |
| | Soil | 0.29 mg/kg dwt | - |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl) -4-hydroxyphenyl]-1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl) -4-hydroxyphenyl]-1-oxopropoxy]- | Fresh water | 0.0023 mg/l | - |
| | Marine water | 0.00023 mg/l | - |
| | Sewage Treatment Plant | 10 mg/l | - |
| | Fresh water sediment | 3.06 mg/kg dwt | - |
| | Marine water sediment | 0.306 mg/kg dwt | - |
| | Soil | 2 mg/kg dwt | - |
| ethylbenzene | Fresh water | 0.1 mg/l | - |
| | Marine water | 0.01 mg/l | - |
| | Sewage Treatment Plant | 9.6 mg/l | - |
| | Fresh water sediment | 13.7 mg/kg dwt | - |
| | Marine water sediment | 1.37 mg/kg dwt | - |
| | Soil | 2.68 mg/kg dwt | - |
| dioctyltin dilaurate | Fresh water | 0.002 µg/l | - |
| | Marine water | 0.0002 µg/l | - |
| | Sewage Treatment Plant | 100 mg/l | - |
| | Fresh water sediment | 0.028 mg/kg dwt | - |
| | Marine water sediment | 0.0028 mg/kg dwt | - |

## SECTION 8: Exposure controls/personal protection

| | | | |
|---|---|---|---|
| | Soil | 0.006 mg/kg dwt | - |
| | Secondary Poisoning | 0.02 mg/kg | - |
| cumene | Fresh water | 0.035 mg/l | - |
| | Marine water | 0.004 mg/l | - |
| | Sewage Treatment Plant | 200 mg/l | - |
| | Fresh water sediment | 3.22 mg/kg dwt | - |
| | Marine water sediment | 0.322 mg/kg dwt | - |
| | Soil | 0.624 mg/kg dwt | - |
| toluene | Fresh water | 0.68 mg/l | - |
| | Marine water | 0.68 mg/l | - |
| | Sewage Treatment Plant | 13.61 mg/l | - |
| | Fresh water sediment | 16.39 mg/kg dwt | - |
| | Marine water sediment | 16.39 mg/kg dwt | - |
| | Soil | 2.89 mg/kg dwt | - |
| benzene | Fresh water | 1.9 mg/l | Sensitivity Distribution |
| | Marine water | 1.9 mg/l | Sensitivity Distribution |
| | Sewage Treatment Plant | 39 mg/l | Sensitivity Distribution |
| | Fresh water sediment | 33 mg/kg dwt | Equilibrium Partitioning |
| | Marine water sediment | 33 mg/kg dwt | Equilibrium Partitioning |
| | Soil | 4.8 mg/kg dwt | Equilibrium Partitioning |

### 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**

**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** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: chemical splash goggles and/or face shield.

**Skin protection**

**Hand protection** : 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.
> 8 hours (breakthrough time): Recommended EN 374 polyvinyl alcohol (PVA) butyl rubber >= 0.7 mm
< 1 hour (breakthrough time): Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber - NBR (>= 0.35 mm). Only suitable as splash protection. Only suitable for brief exposure. In the event of contamination, change protective gloves immediately.

**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 anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Recommended: Cotton or cotton/synthetic overalls or coveralls are normally suitable.

## SECTION 8: Exposure controls/personal protection

**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** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: EN 405:2001 + A1:2009 organic vapour (Type A) and particulate filter FFA2P3 R D

**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** : Fruity.

**Odour threshold** : Not available.

**Melting point/freezing point** : Not applicable.

**Initial boiling point and boiling range** : >100°C (>212°F)

**Flammability (solid, gas)** : Not available.

**Upper/lower flammability or explosive limits** : Lower: 1%
Upper: 7.6%

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

**Auto-ignition temperature** : 393°C (739.4°F)

**Decomposition temperature** : Not applicable.

**pH** : Not applicable.

**Viscosity** : Kinematic (40°C): >20.5 $mm^2/s$

**Solubility(ies)** :

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

**Solubility in water** : Not applicable.

**Miscible with water** : No.

**Partition coefficient: n-octanol/water** : Not applicable.

**Vapour pressure** : 1.5 kPa (11.25 mm Hg)

**Evaporation rate** : 1 (butyl acetate = 1)

**Relative density** : 0.987

**Density** : 0.987 $g/cm^3$

**Vapour density** : 4 [Air = 1]

**Explosive properties** : Not available.

**Oxidising properties** : Not available.

**Particle characteristics**

**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** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.

**10.5 Incompatible materials** : Reactive or incompatible with the following materials:
oxidising materials

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| n-butyl acetate | LC50 Inhalation Gas. | Rat | 390 ppm | 4 hours |
| | LC50 Inhalation Vapour | Rat | >21.1 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >14112 mg/kg | - |
| | LD50 Oral | Rat | 10760 mg/kg | - |
| heptan-2-one | LC50 Inhalation Vapour | Rat | 16.8 mg/l | 4 hours |
| | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | 1600 mg/kg | - |
| 2-(2-butoxyethoxy)ethanol | LD50 Dermal | Rabbit | 2700 mg/kg | - |
| | LD50 Oral | Rat | 4500 mg/kg | - |
| 1,2,4-trimethylbenzene | LC50 Inhalation Vapour | Rat | 18000 mg/m³ | 4 hours |
| | LD50 Oral | Rat | 5 g/kg | - |
| xylene | LC50 Inhalation Gas. | Rat | 5000 ppm | 4 hours |
| | LC50 Inhalation Vapour | Rat - Male | 29000 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 12126 mg/kg | - |
| | LD50 Oral | Rat | 4300 mg/kg | - |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl) -5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropyl]-ω-hydroxy- | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| 2-methoxy-1-methylethyl acetate | LD50 Dermal | Rabbit | >5 g/kg | - |
| | LD50 Dermal | Rat | >5000 mg/kg | - |
| | LD50 Oral | Rat | 8532 mg/kg | - |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl) -5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropoxy]- | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| ethylbenzene | LC50 Inhalation Vapour | Rat | 6350 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 12126 mg/kg | - |
| | LD50 Oral | Rat | 3500 mg/kg | - |

## SECTION 11: Toxicological information

| | | | | |
|---|---|---|---|---|
| dioctyltin dilaurate | LD50 Oral | Rat | 6450 mg/kg | - |
| cumene | LC50 Inhalation Vapour | Rat | 39000 mg/m³ | 4 hours |
| | LD50 Oral | Rat | 1400 mg/kg | - |
| toluene | LC50 Inhalation Vapour | Rat | 28.1 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | 636 mg/kg | - |
| benzene | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | 930 mg/kg | - |

**Conclusion/Summary** : Not available.

**Acute toxicity estimates**

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| 8-409 HS Semi Gloss Clear Coat | 19772.6 | N/A | N/A | 207.6 | N/A |
| n-butyl acetate | 10760 | N/A | N/A | N/A | N/A |
| heptan-2-one | 1600 | N/A | N/A | 16.8 | N/A |
| 2-(2-butoxyethoxy)ethanol | 4500 | 2700 | N/A | N/A | N/A |
| 1,2,4-trimethylbenzene | 5000 | N/A | N/A | 18 | N/A |
| xylene | 4300 | 1100 | 5000 | 29000 | N/A |
| 2-methoxy-1-methylethyl acetate | 8532 | N/A | N/A | N/A | N/A |
| ethylbenzene | 3500 | 12126 | N/A | 11 | N/A |
| dioctyltin dilaurate | 6450 | N/A | N/A | N/A | N/A |
| cumene | N/A | N/A | N/A | 39 | N/A |
| toluene | N/A | N/A | N/A | 28.1 | N/A |

**Irritation/Corrosion**

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| n-butyl acetate | Eyes - Moderate irritant | Rabbit | - | 100 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| heptan-2-one | Skin - Mild irritant | Rabbit | - | 24 hours 14 mg | - |
| 2-(2-butoxyethoxy)ethanol | Eyes - Moderate irritant | Rabbit | - | 24 hours 20 mg | - |
| | Eyes - Severe irritant | Rabbit | - | 20 mg | - |
| xylene | Eyes - Mild irritant | Rabbit | - | 87 mg | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 mg | - |
| | Skin - Mild irritant | Rat | - | 8 hours 60 uL | - |
| | Skin - Moderate irritant | Rabbit | - | 100 % | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| ethylbenzene | Eyes - Severe irritant | Rabbit | - | 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 15 mg | - |
| cumene | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 86 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 10 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| toluene | Eyes - Mild irritant | Rabbit | - | 0.5 minutes 100 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 870 ug | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 2 mg | - |
| | Skin - Mild irritant | Pig | - | 24 hours 250 uL | - |
| | Skin - Mild irritant | Rabbit | - | 435 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 | - |

## SECTION 11: Toxicological information

| | | | | | |
|---|---|---|---|---|---|
| | | | | mg | |
| | Skin - Moderate irritant | Rabbit | - | 500 mg | - |
| benzene | Eyes - Moderate irritant | Rabbit | - | 88 mg | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 2 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 15 mg | - |
| | Skin - Mild irritant | Rat | - | 8 hours 60 uL | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 mg | - |

**Conclusion/Summary** : Not available.

**Sensitisation**

**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 |
|---|---|---|---|
| n-butyl acetate | Category 3 | - | Narcotic effects |
| 1,2,4-trimethylbenzene | Category 3 | - | Respiratory tract irritation |
| 2-methoxy-1-methylethyl acetate | Category 3 | - | Narcotic effects |
| cumene | Category 3 | - | Respiratory tract irritation |
| toluene | Category 3 | - | Narcotic effects |

**Specific target organ toxicity (repeated exposure)**

| Product/ingredient name | Category | Route of exposure | Target organs |
|---|---|---|---|
| ethylbenzene | Category 2 | - | hearing organs |
| dioctyltin dilaurate | Category 1 | - | immune system |
| toluene | Category 2 | - | - |
| benzene | Category 1 | - | - |

**Aspiration hazard**

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

**Information on likely routes of exposure** : Not available.

**Potential acute health effects**

**Eye contact** : No known significant effects or critical hazards.

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

**Skin contact** : May cause an allergic skin reaction.

**Ingestion** : Can cause central nervous system (CNS) depression.

## SECTION 11: Toxicological information

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : No specific data.

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

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

**Conclusion/Summary** : Not available.

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| n-butyl acetate | Acute EC50 397 mg/l | Algae - *Selenastrum capricornutum* | 72 hours |
| | Acute EC50 44 mg/l | Daphnia - *Daphnia magna* | 48 hours |
| | Acute LC50 32 mg/l Marine water | Crustaceans - Brine shrimp - *Artemia salina* | 48 hours |
| | Acute LC50 18 mg/l | Fish - *Pimephales promelas* | 96 hours |
| | Acute NOEC 200 mg/l | Algae | 72 hours |
| heptan-2-one | Acute LC50 131000 µg/l Fresh water | Fish - Fathead minnow - *Pimephales promelas* | 96 hours |
| 2-(2-butoxyethoxy)ethanol | Acute LC50 1300 ppm Fresh water | Fish - Bluegill - *Lepomis macrochirus* | 96 hours |
| 1,2,4-trimethylbenzene | Acute LC50 4910 µg/l Marine water | Crustaceans - Scud - *Elasmopus pectenicrus* - Adult | 48 hours |
| | Acute LC50 7720 µg/l Fresh water | Fish - Fathead minnow - *Pimephales promelas* | 96 hours |
| xylene | Acute EC50 1 to 10 mg/l | Algae | 72 hours |
| | Acute EC50 1 to 10 mg/l | Daphnia - *Daphnia magna* | 48 hours |
| | Acute LC50 8500 µg/l Marine water | Crustaceans - Daggerblade grass shrimp - *Palaemonetes pugio* | 48 hours |
| | Acute LC50 13400 µg/l Fresh water | Fish - Fathead minnow - | 96 hours |

## SECTION 12: Ecological information

| | | | |
|---|---|---|---|
| | | *Pimephales promelas* | |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl) -5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropyl]-ω-hydroxy- | Acute LC50 2.8 mg/l | Fish | 96 hours |
| 2-methoxy-1-methylethyl acetate | Acute EC50 >1000 mg/l | Algae - *Pseudokirchnerella subcapitata* | 96 hours |
| | Acute EC50 408 mg/l | Daphnia - Daphnia - *Daphnia magna* | 48 hours |
| | Acute LC50 134 mg/l | Fish - *Oncorhynchus mykiss* | 96 hours |
| Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl) -5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl) -4-hydroxyphenyl] -1-oxopropoxy]- | Acute LC50 2.8 mg/l | Fish | 96 hours |
| ethylbenzene | Acute EC50 4900 µg/l Marine water | Algae - Diatom - *Skeletonema costatum* | 72 hours |
| | Acute EC50 7700 µg/l Marine water | Algae - Diatom - *Skeletonema costatum* | 96 hours |
| | Acute EC50 6.53 mg/l Marine water | Crustaceans - Brine shrimp - *Artemia sp.* - Nauplii | 48 hours |
| | Acute EC50 2.93 mg/l Fresh water | Daphnia - Water flea - *Daphnia magna* - Neonate | 48 hours |
| | Acute LC50 4200 µg/l Fresh water | Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* | 96 hours |
| cumene | Acute EC50 7.4 mg/l Marine water | Crustaceans - Brine shrimp - *Artemia sp.* - Nauplii | 48 hours |
| | Acute EC50 10.6 mg/l Fresh water | Daphnia - Water flea - *Daphnia magna* - Neonate | 48 hours |
| | Acute LC50 2700 µg/l Fresh water | Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* | 96 hours |
| toluene | Acute EC50 12.5 mg/l | Algae | 72 hours |
| | Acute EC50 >433 ppm Marine water | Algae - Diatom - *Skeletonema costatum* | 96 hours |
| | Acute EC50 11600 µg/l Fresh water | Crustaceans - Scud - *Gammarus pseudolimnaeus* - Adult | 48 hours |
| | Acute EC50 3.8 mg/l | Daphnia - *Daphnia magna* | 48 hours |
| | Acute LC50 5.5 mg/l | Fish - *Oncorhynchus kisutch* | 96 hours |
| | Chronic NOEC 1 mg/l Fresh water | Daphnia - Water flea - *Daphnia magna* | 21 days |
| benzene | Acute EC50 1600000 µg/l Fresh water | Algae - Green algae - *Selenastrum sp.* | 96 hours |
| | Acute EC50 9.23 mg/l Fresh water | Daphnia - Water flea - *Daphnia magna* - Neonate | 48 hours |
| | Acute LC50 21 mg/l Marine water | Crustaceans - Brine shrimp - *Artemia salina* | 48 hours |
| | Acute LC50 5.28 ul/L Fresh water | Fish - Pink salmon - *Oncorhynchus gorbuscha* - Fry | 96 hours |
| | Chronic EC10 >1360 mg/l Fresh water | Algae - Green algae - *Desmodesmus subspicatus* | 96 hours |
| | Chronic NOEC 98 mg/l Fresh water | Daphnia - Water flea - *Daphnia magna* | 21 days |
| | Chronic NOEC 1.5 to 5.4 ul/L Marine water | Fish - Striped bass - *Morone saxatilis* - Juvenile (Fledgling, Hatchling, Weanling) | 4 weeks |

**Conclusion/Summary** : Not available.

# SECTION 12: Ecological information

## 12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|---|---|---|---|
| n-butyl acetate | OECD 301D Ready Biodegradability - Closed Bottle Test | >80 % - 5 days | - | - |
| heptan-2-one | - | 69 % - Readily - 28 days | - | - |
| 2-methoxy-1-methylethyl acetate | OECD 302B Inherent Biodegradability: Zahn-Wellens/ EMPA Test | 100 % - 28 days | - | - |
| | OECD 301F Ready Biodegradability - Manometric Respirometry Test | 83 % - 28 days | - | - |

**Conclusion/Summary** : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| n-butyl acetate | - | - | Readily |
| heptan-2-one | - | - | Readily |
| 2-methoxy-1-methylethyl acetate | - | - | Readily |
| toluene | - | - | Readily |

## 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| n-butyl acetate | 2.3 | - | Low |
| heptan-2-one | 2.26 | - | Low |
| 2-(2-butoxyethoxy)ethanol | 1 | - | Low |
| 1,2,4-trimethylbenzene | 3.63 | 243 | Low |
| xylene | 3.12 | 8.1 to 25.9 | Low |
| 2-methoxy-1-methylethyl acetate | 1.2 | - | Low |
| ethylbenzene | 3.6 | - | Low |
| dioctyltin dilaurate | - | <100 | Low |
| cumene | 3.55 | 35.48 | Low |
| toluene | 2.73 | 90 | Low |
| benzene | 2.13 | 11 | Low |

## 12.4 Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Mobility** : Not available.

## 12.5 Results of PBT and vPvB assessment

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

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

## SECTION 13: Disposal considerations

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

### 13.1 Waste treatment methods

**Product**

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

**Hazardous waste** : Yes.

**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.

**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 | PAINTPAINT | PAINT | Paint |
| **14.3 Transport hazard class(es)** | 3  | 3  | 3  | 3  |
| **14.4 Packing group** | III | III | III | III |
| **14.5 Environmental hazards** | No. | Yes. | No. | No. |

**Additional information**

**ADR/RID** : **Hazard identification number** 30
**Limited quantity** 5 L
**Special provisions** 163, 640E, 650, 367
**Tunnel code** (D/E)

**ADN** : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.
**Special provisions** 163, 367, 640E, 650

**IMDG** : **Emergency schedules** F-E, _S-E_
**Special provisions** 163, 223, 367, 955

## SECTION 14: Transport information

**IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger Aircraft: 10 L. Packaging instructions: Y344.
**Special provisions** A3, A72, A192

**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 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.

##### Prior Informed Consent (PIC)

Not listed.

##### Persistent Organic Pollutants

Not listed.

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

#### Seveso Directive

This product is controlled under the Seveso Directive.

##### Danger criteria

| Category |
|---|
| P5c |

#### National regulations

| Product/ingredient name | List name | Name on list | Classification | Notes |
|---|---|---|---|---|
| benzene | UK Occupational Exposure Limits EH40 - WEL | benzene; benzol | Carc. | - |

#### EU regulations

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

## SECTION 15: Regulatory information

### International regulations

### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

### Montreal Protocol

Not listed.

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Australia** : All components are listed or exempted.

**Canada** : At least one component is not listed.

**China** : At least one component is not listed.

**Eurasian Economic Union** : **Russian Federation inventory**: Not determined.

**Japan** : **Japan inventory (CSCL)**: At least one component is not listed.
**Japan inventory (ISHL)**: Not determined.

**New Zealand** : All components are listed or exempted.

**Philippines** : All components are listed or exempted.

**Republic of Korea** : At least one component is not listed.

**Taiwan** : At least one component is not listed.

**Thailand** : Not determined.

**Turkey** : Not determined.

**United States** : Not determined.

**Viet Nam** : Not determined.

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

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

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

### Procedure used to derive the classification

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

### Full text of abbreviated H statements

## SECTION 16: Other information

| | |
|---|---|
| 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. |
| H340 | May cause genetic defects. |
| H350 | May cause cancer. |
| H360D | May damage the unborn child. |
| H361d | Suspected of damaging the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic 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 Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Carc. 1A | CARCINOGENICITY - Category 1A |
| Carc. 1B | CARCINOGENICITY - Category 1B |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| Muta. 1B | GERM CELL MUTAGENICITY - Category 1B |
| Repr. 1B | REPRODUCTIVE TOXICITY - Category 1B |
| 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 |
| STOT RE 1 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

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**Notice to reader**

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**
**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**

# SUMI
# Safe Use of Mixtures
# Information for end-users

**Title** : Professional spray painting, near-industrial setting

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

## General description of the process covered

Indoor spray painting by professionals with efficient ventilation such as spray booth or local exhaust ventilation

## Operational conditions

**Place of use** : Indoor use

## Risk management measures (RMM)

| Contributing activity | Process category (ies) | Maximum duration | Ventilation | |
|---|---|---|---|---|
| | | | Type | ach (air changes per hour) |
| Preparation of material for application | PROC05 | 1 to 4 hours | Enhanced (mechanical) room ventilation | 5 - 10 |
| Loading of application equipment and handling of coated parts before curing | PROC08a | 15 minutes to 1 hour | Enhanced (mechanical) room ventilation | 5 - 10 |
| Professional application of coatings and inks by spraying | PROC11 | 1 to 4 hours | Local exhaust ventilation | Refer to relevant technical standards |
| Film formation - force drying, stoving and other technologies | PROC04 | 1 to 4 hours | Local exhaust ventilation | Refer to relevant technical standards |
| Cleaning | PROC05 | 1 to 4 hours | Enhanced (mechanical) room ventilation | 5 - 10 |
| Waste management | PROC08a | 15 minutes to 1 hour | Enhanced (mechanical) room ventilation | 5 - 10 |

| Contributing activity | Process category (ies) | Respiratory | Eye | Hands |
|---|---|---|---|---|
| Preparation of material for application | PROC05 | None | Use eye protection according to EN 166. | Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training. |
| Loading of application equipment and handling of coated parts before curing | PROC08a | None | Use eye protection according to EN 166. | Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training. |
| Professional application of coatings and inks by spraying | PROC11 | Compressed-air breathing apparatus to EN 14594 with an assigned protection factor of at least 20. | Use eye protection according to EN 166. | Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training. |
| Film formation - force drying, stoving and other technologies | PROC04 | Wear a respirator conforming to EN140 with an assigned protection factor of at least 10. | None | None |
| Cleaning | PROC05 | Wear a respirator conforming to EN140 with an assigned protection factor of at least 10. | Use eye protection according to EN 166. | Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training. |
| Waste management | PROC08a | Wear a respirator conforming to EN140 with | Use eye protection according to EN 166. | Wear chemical-resistant gloves (tested to EN374) in |

| | | | | |
|---|---|---|---|---|
| | | an assigned protection factor of at least 10. | | combination with specific activity training. |

See chapter 8 of this Safety Data Sheet for specifications.



## Disclaimer

The information in this Safe Use of Mixture Information sheet is based on the data provided by the substance supplier for the substances in the product for which a chemical safety assessment has been carried out at the time of issue. It does not guarantee safe use of the product and does not replace any occupational risk assessment required by legislation. When developing workplace instructions for employees, SUMI sheets should always be considered in combination with the SDS and the label of the product.
No liability is accepted for any damage, no matter of what kind, which is direct or indirect consequence of acts and/or decisions (partly) based on the contents of this document.