# Decothane® Ultra



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

### 1.1 Product identifier

Trade name : Decothane® Ultra

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

Product use : Polyurethane coating, Product is not intended for consumer use

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

Company name of supplier : Sika Limited
Watchmead Welwyn Garden City
Hertfordshire. AL7 1BQ
Telephone : +44 (0)1707 394444
Telefax : +44 (0)1707 329129
E-mail address of person responsible for the SDS : EHS@uk.sika.com

### 1.4 Emergency telephone number

National Chemical Emergency Centre (NCEC)
24 Hour Emergency Telephone Number +44 870 190 6777

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

| | |
|---|---|
| Eye irritation, Category 2 | H319: Causes serious eye irritation. |
| Skin sensitisation, Category 1 | H317: May cause an allergic skin reaction. |
| Long-term (chronic) aquatic hazard, Category 2 | H411: Toxic to aquatic life with long lasting effects. |
| Endocrine disruptor for environment, Category 1 | EUH430: May cause endocrine disruption in the environment. |

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :

Signal word : Danger

Hazard statements : H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

| | | |
|---|---|---|
| H411 | Toxic to aquatic life with long lasting effects. |
| EUH430 | May cause endocrine disruption in the environment. |

Precautionary statements :

**Prevention:**

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ eye protection/ face protection. |

**Response:**

| | |
|---|---|
| P391 | Collect spillage. |

**Storage:**

| | |
|---|---|
| P405 | Store locked up. |

**Disposal:**

| | |
|---|---|
| P501 | Dispose of contents/container in accordance with local regulation. |

**Hazardous components which must be listed on the label:**

Hardener MTJ (Polyoxypropylenetri(morpholinoaldimine))
Hardener MI (Isophoronedi(morpholinoaldimine))
Isophorondiisocyanate homopolymer
triphenyl phosphate
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
Pentamethyl piperidylsebacate

**Additional Labelling**

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: This substance/mixture contains components considered to have endocrine disrupting properties for environment , according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

**Components**

| Chemical name | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | Classification | Concentration (% w/w) |
|---|---|---|---|
| Diphenyl tolyl phosphate MCS | Not Assigned<br>945-730-9<br>01-2119511174-52-XXXX | Aquatic Acute 1; H400<br>Aquatic Chronic 3; H412 | >= 5 - < 10 |
| Hardener MTJ (Polyoxypropylene-tri(morpholinoaldimine)) | 1379822-00-0<br>Not Assigned<br>UK-01-9733181806-8-0001 | Skin Sens. 1B; H317<br>Aquatic Chronic 2; H411 | >= 5 - < 10 |
| propylene carbonate | 108-32-7<br>203-572-1<br>607-194-00-1<br>01-2119537232-48-XXXX | Eye Irrit. 2; H319 | >= 5 - < 10 |
| Hardener MI (Isopho-ronedi(morpholinoaldimine))<br>Contains:<br>2,2-Dimethyl-3-(4-morpholinyl)propanal <= 7 % | 1217271-02-7<br>700-584-3<br>UK-01-8398764756-3-0001 | Skin Irrit. 2; H315<br>Eye Irrit. 2; H319<br>Skin Sens. 1; H317<br>Aquatic Chronic 3; H412 | >= 2,5 - < 5 |
| Isophorondiisocyanate homopol-ymer<br>Contains:<br>3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,09 % | 53880-05-0<br>500-125-5<br>01-2119488734-24-XXXX | Skin Sens. 1B; H317<br>STOT SE 3; H335 (Respiratory system) | >= 2,5 - < 5 |
| triphenyl phosphate | 115-86-6<br>204-112-2 | Aquatic Acute 1; H400<br>Aquatic Chronic 1; H410<br>ED ENV 1; EUH430<br>M-Factor (Acute aquatic toxicity): 1<br>M-Factor (Chronic aquatic toxicity): 1 | >= 2,5 - < 5 |
| diphenyl tolyl phosphate | 26444-49-5<br>247-693-8 | Aquatic Acute 1; H400<br>Aquatic Chronic 3; H412 | >= 2,5 - < 5 |
| ethyl 4-oxovalerate | 539-88-8<br>208-728-2<br>01-2120765759-33-XXXX | Skin Irrit. 2; H315<br>Eye Irrit. 2; H319 | >= 2,5 - < 5 |

| | | | |
|---|---|---|---|
| n-butyl acetate | 123-86-4<br>204-658-1<br>607-025-00-1<br>01-2119485493-29-XXXX | Flam. Liq. 3; H226<br>STOT SE 3; H336 (Central nervous system)<br>EUH066 | >= 1 - < 2,5 |
| 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate | 4098-71-9<br>223-861-6<br>615-008-00-5<br>01-2119490408-31-XXXX | Acute Tox. 1; H330<br>Skin Corr. 1; H314<br>Eye Dam. 1; H318<br>Resp. Sens. 1; H334<br>Skin Sens. 1A; H317<br>Aquatic Chronic 2; H411<br>EUH071<br>---<br>specific concentration limit<br>Resp. Sens. 1; H334<br>>= 0,5 %<br>---<br>specific concentration limit<br>Skin Sens. 1A; H317<br>>= 0,001 %<br>---<br>Acute toxicity esti-mate<br><br>Acute inhalation tox-icity (dust/mist): 0,03 mg/l | >= 0,25 - < 0,5 |
| Pentamethyl piperidylsebacate<br>Contains:<br>bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate<br>methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 1065336-91-5<br>915-687-0<br>01-2119491304-40-XXXX | Skin Sens. 1A; H317<br>Repr. 2; H361f<br>Aquatic Acute 1; H400<br>Aquatic Chronic 1; H410<br>---<br>M-Factor (Acute aquatic toxicity): 1<br>M-Factor (Chronic aquatic toxicity): 1 | >= 0,25 - < 0,5 |

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

| | | |
|---|---|---|
| General advice | : | Move out of dangerous area.<br>Consult a physician.<br>Show this safety data sheet to the doctor in attendance. |
| If inhaled | : | Move to fresh air.<br>Consult a physician after significant exposure. |
| In case of skin contact | : | Take off contaminated clothing and shoes immediately.<br>Wash off with soap and plenty of water.<br>If symptoms persist, call a physician. |
| In case of eye contact | : | Immediately flush eye(s) with plenty of water.<br>Remove contact lenses.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist. |
| If swallowed | : | Do not induce vomiting without medical advice.<br>Rinse mouth with water.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person. |

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

| | | |
|---|---|---|
| Symptoms | : | Allergic reactions<br>Excessive lachrymation<br>See Section 11 for more detailed information on health effects and symptoms. |
| Risks | : | irritant effects<br>sensitising effects<br><br>May cause an allergic skin reaction.<br>Causes serious eye irritation. |

### 4.3 Indication of any immediate medical attention and special treatment needed

| | | |
|---|---|---|
| Treatment | : | Treat symptomatically. |

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

| | | |
|---|---|---|
| Suitable extinguishing media | : | In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction. |

### 5.2 Special hazards arising from the substance or mixture

| | | |
|---|---|---|
| Specific hazards during fire-fighting | : | Do not allow run-off from fire fighting to enter drains or water courses. |
| Hazardous combustion products | : | No hazardous combustion products are known |

### 5.3 Advice for firefighters

| | | |
|---|---|---|
| Special protective equipment for firefighters | : | In the event of fire, wear self-contained breathing apparatus. |
| Further information | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

| | | |
|---|---|---|
| Personal precautions | : | Use personal protective equipment.<br>Deny access to unprotected persons. |

### 6.2 Environmental precautions

| | | |
|---|---|---|
| Environmental precautions | : | Do not flush into surface water or sanitary sewer system.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |

### 6.3 Methods and material for containment and cleaning up

| | | |
|---|---|---|
| Methods for cleaning up | : | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).<br>Keep in suitable, closed containers for disposal. |

### 6.4 Reference to other sections

For personal protection see section 8.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

| | | |
|---|---|---|
| Advice on safe handling | : | Avoid exceeding the given occupational exposure limits (see section 8).<br>Do not get in eyes, on skin, or on clothing.<br>For personal protection see section 8.<br>Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should |

not be employed in any process in which this mixture is being used.
Smoking, eating and drinking should be prohibited in the application area.
Follow standard hygiene measures when handling chemical products

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Store in accordance with local regulations.

Further information on storage stability : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

Specific use(s) : Consult most current local Product Data Sheet prior to any use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Occupational Exposure Limits**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters * | Basis * |
|---|---|---|---|---|
| Isophorondiisocyanate homopolymer | 53880-05-0 | TWA | 0,01 mg/m3 (NCO) | 98/24/EC I |
| | Further information: Skin, Dermal and respiratory sensitisation, Binding | | | |
| | | STEL | 0,02 mg/m3 (NCO) | 98/24/EC I |
| triphenyl phosphate | 115-86-6 | TWA | 3 mg/m3 | GB EH40 |
| | | STEL | 6 mg/m3 | GB EH40 |
| n-butyl acetate | 123-86-4 | TWA | 150 ppm 724 mg/m3 | GB EH40 |
| | | STEL | 200 ppm 966 mg/m3 | GB EH40 |
| | | STEL | 150 ppm 723 mg/m3 | 2019/1831/EU |
| | Further information: Indicative | | | |
| | | TWA | 50 ppm | 2019/1831/EU |

| | | | | |
|---|---|---|---|---|
| | | | 241 mg/m3 | |
| 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate | 4098-71-9 | TWA | 0,02 mg/m3 (NCO) | GB EH40 |
| | Further information: Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even in tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing airway hyper-responsiveness, but which do not include the disease themselves. The latter substances are not classified as asthmagens or respiratory sensitisers. Further information can be found in the HSE publication Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma., Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced to as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance., Capable of causing occupational asthma., The 'Sen' notation in the list of WELs has been assigned only to those substances which may cause occupational asthma in the categories shown in Table 1. It should be remembered that other substances not in these tables may cause occupational asthma. HSE's asthma web pages (www.hse.gov.uk/asthma) provide further information. | | | |
| | | STEL | 0,07 mg/m3 (NCO) | GB EH40 |
| | | TWA | 0,01 mg/m3 (NCO) | 98/24/EC I |
| | Further information: Skin, Dermal and respiratory sensitisation, Binding | | | |
| | | STEL | 0,02 mg/m3 (NCO) | 98/24/EC I |

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

**Biological occupational exposure limits**

| Substance name | CAS-No. | Control parame- | Sampling time | Basis |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| | | ters | | |
| 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate | 4098-71-9 | isocyanate-derived diamine (Isocyanates): 1 µmol/mol creatinine (Urine) | At the end of the period of exposure | GB EH40 BAT |

### 8.2 Exposure controls

**Appropriate engineering controls**

Maintain air concentrations below occupational exposure standards.
Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment (PPE)**

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.
Suitable for short time use or protection against splashes:
Butyl rubber/nitrile rubber gloves (> 0,1 mm)
Contaminated gloves should be removed.
Suitable for permanent exposure:
Viton gloves (0.4 mm),
breakthrough time >30 min.

Skin and body protection : Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Respiratory protection : In case of inadequate ventilation wear 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.
organic vapor filter (Type A)
A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm
Ensure adequate ventilation. This can be achieved by local exhaust extraction or by general ventilation. (EN 689 - Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficent to keep the concentrations under the occupational exposure limits then respiration protection measures must be used.

**Environmental exposure controls**

General advice : Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| Appearance | : | liquid |
| Colour | : | dark grey |
| Odour | : | mild |
| Melting point/ range / Freezing point | : | No data available |
| Boiling point/boiling range | : | No data available |
| Flammability (solid, gas) | : | No data available |

**Upper/lower flammability or explosive limits**

| | | |
|---|---|---|
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Flash point | : | 150 °C<br>Method: closed cup |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| pH | : | Not applicable<br>substance/mixture is non-soluble (in water) |

**Viscosity**

| | | |
|---|---|---|
| Viscosity, dynamic | : | ca. 4.000 mPa.s (20 °C) |
| Viscosity, kinematic | : | > 20,5 mm2/s (40 °C) |

**Solubility(ies)**

| | | |
|---|---|---|
| Water solubility | : | insoluble |
| Solubility in other solvents | : | insoluble |
| Partition coefficient: n-octanol/water | : | No data available |
| Vapour pressure | : | 0,04 hPa |
| Density | : | ca. 1,427 g/cm3 (20 °C) |
| Relative vapour density | : | No data available |

Particle characteristics : No data available

**9.2 Other information**

No data available

## SECTION 10: Stability and reactivity

**10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

**10.2 Chemical stability**

The product is chemically stable.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : No hazards to be specially mentioned.

**10.4 Conditions to avoid**

Conditions to avoid : No data available

**10.5 Incompatible materials**

Materials to avoid : No data available

**10.6 Hazardous decomposition products**

: No hazardous decomposition products are known.

## SECTION 11: Toxicological information

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

**Acute toxicity**

Not classified due to lack of data.

**Components:**

**Diphenyl tolyl phosphate MCS:**

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg

**Hardener MTJ (Polyoxypropylenetri(morpholinoaldimine)):**

Acute oral toxicity : LD50 Oral (Rat): > 2.001 mg/kg

**Hardener MI (Isophoronedi(morpholinoaldimine)):**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 Oral (Rat): > 2.001 mg/kg |

**ethyl 4-oxovalerate:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 Oral (Rat): > 2.000 mg/kg |

**n-butyl acetate:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 Oral (Rat): > 5.000 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): 23,4 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour |
| Acute dermal toxicity | : | LD50 Dermal (Rabbit): > 5.000 mg/kg |

**3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 Oral (Rat): 4.814 mg/kg |
| Acute inhalation toxicity | : | Acute toxicity estimate: 0,03 mg/l<br>Test atmosphere: dust/mist<br>Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008<br><br>LC50 (Rat): 0,03 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist |
| Acute dermal toxicity | : | LD50 Dermal (Rat): > 7.000 mg/kg |

**Pentamethyl piperidylsebacate:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 Oral (Rat): 3.230 mg/kg |

**Skin corrosion/irritation**

Not classified due to lack of data.

**Components:**

**Hardener MI (Isophoronedi(morpholinoaldimine)):**

| | | |
|---|---|---|
| Method | : | Regulation (EC) No. 440/2008, Annex, B.46 |
| Result | : | Skin irritation |

**n-butyl acetate:**

| | | |
|---|---|---|
| Result | : | Repeated exposure may cause skin dryness or cracking. |

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Components:**

**Hardener MI (Isophoronedi(morpholinoaldimine)):**

| | | |
|---|---|---|
| Method | : | OECD Test Guideline 405 |
| Result | : | Eye irritation |

**Respiratory or skin sensitisation**

**Skin sensitisation**

May cause an allergic skin reaction.

**Respiratory sensitisation**

Not classified due to lack of data.

**Components:**

**Hardener MI (Isophoronedi(morpholinoaldimine)):**

| | | |
|---|---|---|
| Method | : | Regulation (EC) No. 440/2008, Annex, B.42 (LLNA) |
| Result | : | May cause sensitisation by skin contact. |

**Germ cell mutagenicity**

Not classified due to lack of data.

**Carcinogenicity**

Not classified due to lack of data.

**Reproductive toxicity**

Not classified due to lack of data.

**STOT - single exposure**

Not classified due to lack of data.

**STOT - repeated exposure**

Not classified due to lack of data.

**Aspiration hazard**

Not classified due to lack of data.

**11.2 Information on other hazards**

**Endocrine disrupting properties**

Not classified due to lack of data.

**Product:**

| | | |
|---|---|---|
| Assessment | : | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |

## SECTION 12: Ecological information

### 12.1 Toxicity

**Components:**

**Hardener MTJ (Polyoxypropylenetri(morpholinoaldimine)):**

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 45,1 mg/l<br>Exposure time: 48 h<br><br>NOEC (Daphnia magna (Water flea)): 12,5 mg/l<br>Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | EC50 (Pseudokirchneriella subcapitata (green algae)): 1,56 mg/l<br>Exposure time: 72 h |

**Hardener MI (Isophoronedi(morpholinoaldimine)):**

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 40,2 mg/l<br>Exposure time: 48 h<br><br>NOEC (Daphnia magna (Water flea)): 17,1 mg/l<br>Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | EC50 (Pseudokirchneriella subcapitata (green algae)): 89 mg/l<br>Exposure time: 72 h |

**triphenyl phosphate:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 0,4 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 1 mg/l<br>Exposure time: 48 h |
| Toxicity to algae/aquatic plants | : | EC50 (Pseudokirchneriella subcapitata (green algae)): 2 mg/l<br>Exposure time: 96 h |
| M-Factor (Acute aquatic toxicity) | : | 1 |
| M-Factor (Chronic aquatic toxicity) | : | 1 |

**ethyl 4-oxovalerate:**

| | | |
|---|---|---|
| Toxicity to algae/aquatic plants | : | ErC50 (algae): 932,1 mg/l<br>Exposure time: 72 h |
| Toxicity to microorganisms | : | EC50 (Natural microorganism): 1.000 mg/l |

Exposure time: 3 h

**n-butyl acetate:**

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 647,7 mg/l
Exposure time: 72 h

**Pentamethyl piperidylsebacate:**

Toxicity to fish : LC50 (Fish): 0,97 mg/l
Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 1

M-Factor (Chronic aquatic toxicity) : 1

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

### 12.6 Endocrine disrupting properties

**Product:**

Assessment : This substance/mixture contains components considered to have endocrine disrupting properties for environment , according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

**Components:**

**triphenyl phosphate:**

Assessment : The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for the environment.

### 12.7 Other adverse effects

**Product:**

| | | |
|---|---|---|
| Additional ecological information | : | An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.<br>Toxic to aquatic life with long lasting effects. |

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

| | | |
|---|---|---|
| Product | : | The generation of waste should be avoided or minimized wherever possible.<br>Empty containers or liners may retain some product residues.<br>This material and its container must be disposed of in a safe way.<br>Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.<br>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.<br>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. |
| European Waste Catalogue | : | 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances |
| Contaminated packaging | : | 15 01 10* packaging containing residues of or contaminated by dangerous substances |

## SECTION 14: Transport information

### 14.1 UN number or ID number

| | | |
|---|---|---|
| **ADR** | : | Not regulated as a dangerous good |
| **IMDG** | : | Not regulated as a dangerous good |
| **IATA** | : | Not regulated as a dangerous good |

### 14.2 UN proper shipping name

| | | |
|---|---|---|
| **ADR** | : | Not regulated as a dangerous good |
| **IMDG** | : | Not regulated as a dangerous good |
| **IATA** | : | Not regulated as a dangerous good |

### 14.3 Transport hazard class(es)

| | | |
|---|---|---|
| **ADR** | : | Not regulated as a dangerous good |

| | | |
|---|---|---|
| **IMDG** | : | Not regulated as a dangerous good |
| **IATA** | : | Not regulated as a dangerous good |

**14.4 Packing group**

| | | |
|---|---|---|
| **ADR** | : | Not regulated as a dangerous good |
| **IMDG** | : | Not regulated as a dangerous good |
| **IATA (Cargo)** | : | Not regulated as a dangerous good |
| **IATA (Passenger)** | : | Not regulated as a dangerous good |

**14.5 Environmental hazards**

Not regulated as a dangerous good

**14.6 Special precautions for user**

Not applicable

**14.7 Maritime transport in bulk according to IMO instruments**

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

| | | |
|---|---|---|
| UK REACH List of restrictions (Annex 17) | : | Conditions of restriction for the following entries should be considered:<br>Number on list 3<br><br>Number on list 40<br>This substance/mixture shall not be used in aerosol dispensers intended for supply to the general public for entertainment and decorative purposes.<br><br>Number on list 74: 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate |
| UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation | : | Not applicable |
| The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain) | : | Not applicable |
| International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors | : | Not applicable |

| | | |
|---|---|---|
| Regulation (EU) No 2024/590 on substances that deplete the ozone layer | : | Not applicable |
| UK REACH List of substances subject to authorisation (Annex XIV) | : | Not applicable |
| GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation | : | Not applicable |

The Control of Explosives Precursors and Poisons Regulations (Poisons Act, as amended)
This product is regulated by the Poisons Act 1972 (as amended). All suspicious transactions, and significant disappearances and thefts must be reported.

phosphoric acid (Schedule 1A Part 1)

Control of Major Accident Hazards Regulations 2015 (COMAH) E2 ENVIRONMENTAL HAZARDS

| | | |
|---|---|---|
| Volatile organic compounds | : | Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC)<br>Volatile organic compounds (VOC) content: <= 3% w/w<br>no VOC duties<br><br>Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control)<br>Volatile organic compounds (VOC) content: 5% w/w |

If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.

| | | |
|---|---|---|
| Health, safety and environmental regulation/legislation specific for the substance or mixture: | : | Environmental Protection Act 1990 & Subsidiary Regulations<br>Health and Safety at Work Act 1974 & Subsidiary Regulations<br>Control of Substances Hazardous to Health Regulations (COSHH)<br>May be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments. |

**Other regulations:**

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.
Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

## SECTION 16: Other information

### Full text of H-Statements

| | | |
|---|---|---|
| EUH430 | : | May cause endocrine disruption in the environment. |
| H226 | : | Flammable liquid and vapour. |
| H314 | : | Causes severe skin burns and eye damage. |
| H315 | : | Causes skin irritation. |
| H317 | : | May cause an allergic skin reaction. |
| H318 | : | Causes serious eye damage. |
| H319 | : | Causes serious eye irritation. |
| H330 | : | Fatal if inhaled. |
| H334 | : | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | : | May cause respiratory irritation. |
| H336 | : | May cause drowsiness or dizziness. |
| H361f | : | Suspected of damaging fertility. |
| 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. |

### Full text of other abbreviations

| | | |
|---|---|---|
| Acute Tox. | : | Acute toxicity |
| Aquatic Acute | : | Short-term (acute) aquatic hazard |
| Aquatic Chronic | : | Long-term (chronic) aquatic hazard |
| ED ENV | : | Endocrine disruptor for environment |
| Eye Dam. | : | Serious eye damage |
| Eye Irrit. | : | Eye irritation |
| Flam. Liq. | : | Flammable liquids |
| Repr. | : | Reproductive toxicity |
| Resp. Sens. | : | Respiratory sensitisation |
| Skin Corr. | : | Skin corrosion |
| Skin Irrit. | : | Skin irritation |
| Skin Sens. | : | Skin sensitisation |
| STOT SE | : | Specific target organ toxicity - single exposure |
| 2019/1831/EU | : | Europe. Commission Directive 2019/1831/EU establishing a fifth list of indicative occupational exposure limit values |
| 98/24/EC I | : | Europe. Chemical Agents Directive - Annex I: Binding occupational exposure limit values |
| GB EH40 | : | UK. EH40 WEL - Workplace Exposure Limits |
| GB EH40 BAT | : | UK. Biological monitoring guidance values |
| 2019/1831/EU / TWA | : | Limit Value - eight hours |
| 2019/1831/EU / STEL | : | Short term exposure limit |
| 98/24/EC I / STEL | : | Limit values Short-term |
| 98/24/EC I / TWA | : | Limit values 8 hours |
| GB EH40 / TWA | : | Long-term exposure limit (8-hour TWA reference period) |
| GB EH40 / STEL | : | Short-term exposure limit (15-minute reference period) |
| ADR | : | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| CAS | : | Chemical Abstracts Service |

| | | |
|---|---|---|
| DNEL | : | Derived no-effect level |
| EC50 | : | Half maximal effective concentration |
| GHS | : | Globally Harmonized System |
| IATA | : | International Air Transport Association |
| IMDG | : | International Maritime Code for Dangerous Goods |
| LD50 | : | Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals) |
| LC50 | : | Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period) |
| MARPOL | : | International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 |
| OEL | : | Occupational Exposure Limit |
| PBT | : | Persistent, bioaccumulative and toxic |
| PNEC | : | Predicted no effect concentration |
| REACH | : | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency |
| SVHC | : | Substances of Very High Concern |
| vPvB | : | Very persistent and very bioaccumulative |

**Further information**

| **Classification of the mixture:** | | **Classification procedure:** |
|---|---|---|
| Eye Irrit. 2 | H319 | Calculation method |
| Skin Sens. 1 | H317 | Calculation method |
| Aquatic Chronic 2 | H411 | Calculation method |
| ED ENV 1 | EUH430 | Calculation method |

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

Changes as compared to previous version !

GB / EN