# watco® SAFETY DATA SHEET

Concrex Sub Zero - Resin

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

### 1.1 Product identifier

**Product name** : Concrex Sub Zero - Resin

**Product description** : repair product

**Product type** : Liquid.

**UFI** : 67Q0-Y0EJ-C00D-Q158

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

| Identified uses |
|---|
| Industrial<br>Professional<br>Consumer |

| Uses advised against | Reason |
|---|---|
| None identified. | - |

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

Watco UK Limited
Eastgate Court
195-205 High Street
Guildford
Surrey
GU1 3EH
United Kingdom
Watco UK:
T: +44 (0) 1483 425000 (08:00 - 18:00)
F: +44 (0) 1483 428888

Watco FR
COLOFT - Espace de coworking
Arteparc
9 rue des Bouleaux
59810 Lesquin, France
Watco FR:
T: +33 (0) 3 20 52 77 77
F: +33 (0) 3 20 52 38 39
info@watco.fr
Watco BE:
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Watco GmbH DE
Kränkelsweg 14
41748 Viersen
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Watco DE:
T: +49 (0) 21 62 530 17 17(08:00 - 17:00)
F: +49 (0) 21 62 530 17 77
info@watco.de
Watco AT:
T: +43 1 310 09 10

**e-mail address of person responsible for this SDS** : rpmeurohas@rustoleum.eu

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

### 1.4 Emergency telephone number

**National advisory body/Poison Centre**

Telephone number Ireland : 809 2166
Available 8am to 10pm 7 days per week

**Supplier**

Telephone number Ireland : +353 19014670

Hours of operation : 24 / 7

# SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Eye Irrit. 2, H319
Skin Sens. 1, H317
Aquatic Chronic 3, H412

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

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

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

### 2.2 Label elements

**Hazard pictograms** :

**Signal word** : Warning

**Hazard statements** : H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H412 - Harmful to aquatic life with long lasting effects.

**Precautionary statements**

**General** : P103 - Read carefully and follow all instructions.
P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.

**Prevention** : P280 - Wear protective gloves. Wear eye or face protection.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : bis(4-(1,2-bis(ethoxycarbonyl)ethylamino)-3-methylcyclohexyl)methane
tetraethylN,N'-( methylenedicyclohexane-4,1-diyl) bis-dl-aspartate
diethyl fumarate
pine oil
turpentine oil

**Supplemental label elements** : EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

**Supplemental label elements : Detergents - Regulation (EC) No 907/2006** : Not applicable.

## SECTION 2: Hazards identification

**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

**Ireland**

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|---|---|---|---|
| bis(4-(1,2-bis (ethoxycarbonyl)ethylamino) -3-methylcyclohexyl) methane | REACH #: 01-0000015937-58<br>EC: 412-060-9<br>CAS: 136210-32-7<br>Index: 607-350-00-9 | ≥50 - ≤75 | Skin Sens. 1, H317<br>Aquatic Chronic 3, H412 | - | [1] |
| tetraethylN,N'-( methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | REACH #: 01-0000017556-64<br>EC: 429-270-1<br>CAS: 136210-30-5<br>Index: 607-521-00-8 | ≥25 - ≤50 | Skin Sens. 1, H317<br>Aquatic Chronic 3, H412 | - | [1] |
| hydrocarbons, aromatic, C9 | REACH #: 01-2119455851-35<br>EC: 918-668-5 | ≤5 | Flam. Liq. 3, H226<br>STOT SE 3, H335<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411<br>EUH066 | - | [1] |
| diethyl fumarate | EC: 210-819-7<br>CAS: 623-91-6 | <3 | Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT SE 3, H335 | ATE [Oral] = 1780 mg/kg | [1] |
| diethyl fumarate | EC: 210-819-7<br>CAS: 623-91-6 | ≤3 | Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>STOT SE 3, H335 | ATE [Oral] = 1780 mg/kg | [1] |
| pine oil | CAS: 8002-09-3 | ≤0,3 | Flam. Liq. 3, H226 | - | [1] |

## SECTION 3: Composition/information on ingredients

| | | | | | |
|---|---|---|---|---|---|
| | List #: 616-792-1 | | Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 | | |
| butyl glycollate | REACH #: 01-2119514685-36<br>EC: 230-991-7<br>CAS: 7397-62-8 | ≤0,3 | Eye Dam. 1, H318<br>Repr. 2, H361 | - | [1] |
| Turpentine, oil | REACH #: 01-2119553060-53<br>EC: 232-350-7<br>CAS: 8006-64-2<br>Index: 650-002-00-6 | ≤0,3 | Flam. Liq. 3, H226<br>Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411<br>**See Section 16 for the full text of the H statements declared above.** | ATE [Oral] = 500 mg/kg<br>ATE [Dermal] = 1100 mg/kg<br>ATE [Inhalation (vapours)] = 13,7 mg/l | [1] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

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

Type

[1] Substance classified with a health or environmental hazard

List numbers have no legal significance.
This mixture contains ≥ 1% of titanium dioxide. The Annex VI classification of titanium dioxide does not apply to this mixture according to Note 10.

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

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

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If 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 adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**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.

## SECTION 4: First aid measures

**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 adverse health effects persist or are severe. 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. 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** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : No specific data.

**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** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

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

**Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
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.

## SECTION 5: Firefighting measures

**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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

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

**Small spill** : Stop leak if without risk. Move containers from spill area. 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. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. 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.

**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.

### 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. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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.

# SECTION 7: Handling and storage

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

Store in accordance with local regulations. 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. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

**Recommendations** : Not available.

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

# SECTION 8: Exposure controls/personal protection

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

### 8.1 Control parameters

**Occupational exposure limits / Biological exposure indices**

**Ireland**

No exposure limit value known.

No exposure indices known.

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|---|---|---|---|---|---|
| tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | DNEL | Long term Oral | 4 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 28 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 4 mg/kg bw/day | Workers | Systemic |
| hydrocarbons, aromatic, C9 | DNEL | Long term Inhalation | 150 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 25 mg/kg | Workers | Systemic |
| | DNEL | Long term Dermal | 11 mg/kg | General population | Systemic |
| | DNEL | Long term Inhalation | 32 mg/m³ | General population | Systemic |
| | DNEL | Long term Oral | 11 mg/kg | General population | Systemic |
| butyl glycollate | DNEL | Long term Dermal | 34,7 mg/kg | Workers | Systemic |
| | DNEL | Long term Inhalation | 21,2 mg/m³ | Workers | Systemic |
| | DNEL | Long term Oral | 2 mg/kg | General population | Systemic |

## SECTION 8: Exposure controls/personal protection

| | | | | | |
|---|---|---|---|---|---|
| | DNEL | Long term Dermal | 20,8 mg/kg | General population | Systemic |
| | DNEL | Long term Dermal | 0,28 mg/kg | General population | Local |
| | DNEL | Long term Inhalation | 43,5 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 43,5 mg/m³ | General population | Local |
| Turpentine, oil | DNEL | Short term Dermal | 0,161 mg/cm² | Workers | Local |
| | DNEL | Short term Dermal | 25 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 5,98 mg/m³ | Workers | Systemic |
| | DNEL | Short term Dermal | 0,081 mg/cm² | General population [Consumers] | Local |
| | DNEL | Long term Inhalation | 1,06 mg/m³ | General population [Consumers] | Systemic |
| | DNEL | Long term Oral | 0,31 mg/kg bw/day | General population [Consumers] | Systemic |

**PNECs**

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|---|---|---|---|
| tetraethylN,N'-( methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | Fresh water | 0,00013 mg/l | - |
| | Marine | 0,000013 mg/l | - |
| | Fresh water sediment | 0,21 mg/kg dwt | - |
| | Marine water sediment | 0,02 mg/kg dwt | - |
| | Soil | 0,1 mg/kg dwt | - |
| | Sewage Treatment Plant | 31,1 mg/l | - |
| | Secondary Poisoning | 66,67 mg/kg | - |
| butyl glycollate | Fresh water | 0,05 mg/l | - |
| | Soil | 0,0112 mg/kg | - |
| | Fresh water sediment | 0,203 mg/kg | - |
| | Sewage Treatment Plant | 232 mg/l | - |
| Turpentine, oil | Fresh water sediment | 8,8 µg/l | - |
| | Marine | 0,88 µg/l | - |
| | Fresh water sediment | 2,27 mg/kg | - |
| | Fresh water sediment | 0,227 mg/kg | - |
| | Soil | 0,45 mg/kg | - |
| | Sewage Treatment Plant | 6,6 mg/l | - |

### 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**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.

## SECTION 8: Exposure controls/personal protection

**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. Use eye protection according to EN 166. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: safety glasses with side-shields (EN 166)

**Skin protection**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
The breakthrough time must be greater than the end use time of the product.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

**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): (EN 374) nitrile rubber (0.5mm)

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN374. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Body protection** : 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. Recommended: (EN 467) Overalls buttoned to the neck and wrist.

**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: organic vapour filter (Type A) (EN 140)

**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

**Physical state** : Liquid.

**Colour** : Grey.

**Odour** : Mild.

**Odour threshold** : Not available.

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

## SECTION 9: Physical and chemical properties

**Initial boiling point and boiling range** : Not relevant due to nature of the product.

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

**Lower and upper explosion limit** : Not available.

**Flash point** : Closed cup: >74°C (>165,2°F) [Literature]

**Auto-ignition temperature** : Not relevant due to nature of the product.

**Decomposition temperature** : Not available.

**pH** : Not applicable.

**pH : Justification** : Product is non-soluble (in water).

**Viscosity** : Dynamic (room temperature): >500 mPa·s [Literature]
Kinematic (room temperature): 463 $mm^2/s$ [calculated.]
Kinematic (40°C): Not available.

**Solubility(ies)** :

Not available.

**Solubility in water** : Not available.

**Miscible with water** : No.

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

**Vapour pressure** : <0,4 kPa (<3 mm Hg) [calculated.]

**Evaporation rate** : Not available.

**Relative density** : Not available.

**Density** : 1,08 g/$cm^3$ [20°C (68°F)] [DIN 53217]

**Vapour density** : Not available.

**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** : No specific data.

**10.5 Incompatible materials** : No specific data.

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

### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| bis(4-(1,2-bis (ethoxycarbonyl)ethylamino) -3-methylcyclohexyl) methane | LC50 Inhalation Dusts and mists | Rat - Male, Female | >4,224 mg/l | 4 hours |
| tetraethylN,N'-( methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | LC50 Inhalation Dusts and mists | Rat | >4,224 mg/m³ | 4 hours |
| | LD50 Oral | Rat | >2000 mg/kg | - |
| hydrocarbons, aromatic, C9 | LD50 Oral | Rat | 8400 mg/kg | - |
| diethyl fumarate | LD50 Oral | Rat | 1780 mg/kg | - |
| diethyl fumarate | LD50 Oral | Rat | 1780 mg/kg | - |
| pine oil | LD50 Dermal | Rabbit | 5 g/kg | - |
| | LD50 Oral | Rat | 2,1 g/kg | - |
| butyl glycollate | LD50 Oral | Rat | 4595 mg/kg | - |
| Turpentine, oil | LC50 Inhalation Vapour | Rat | 16600 mg/m³ | 2 hours |
| | LC50 Inhalation Vapour | Rat | 13700 mg/m³ | 4 hours |
| | LC50 Inhalation Vapour | Rat | 13700 mg/m³ | 4 hours |
| | LD50 Oral | Rat | 3956 mg/kg | - |
| | LDLo Dermal | Rabbit | 5010 mg/kg | - |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### 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) |
|---|---|---|---|---|---|
| Concrex Sub Zero - Resin | 42047,1 | N/A | N/A | N/A | N/A |
| hydrocarbons, aromatic, C9 | 8400 | N/A | N/A | N/A | N/A |
| diethyl fumarate | 1780 | N/A | N/A | N/A | N/A |
| diethyl fumarate | 1780 | N/A | N/A | N/A | N/A |
| pine oil | 2100 | 5000 | N/A | N/A | N/A |
| butyl glycollate | 4595 | N/A | N/A | N/A | N/A |
| Turpentine, oil | 500 | 1100 | N/A | 13,7 | N/A |

### Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| tetraethylN,N'-( methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | Eyes - Redness of the conjunctivae | Rabbit | 1 | - | - |
| | Skin - Mild irritant | Rabbit | - | - | - |
| hydrocarbons, aromatic, C9 | Eyes - Mild irritant | Rabbit | - | 24 hours 100 Ul | - |
| pine oil | Skin - Severe irritant | Rabbit | - | 24 hours 500 milligrams | - |
| Turpentine, oil | Skin - Severe irritant | Human | - | 0.1 Percent | - |
| | Skin - Severe irritant | Rabbit | - | 500 microliters | - |

**Skin** : Based on available data, the classification criteria are not met.

**Eyes** : Causes serious eye irritation.

**Respiratory** : Based on available data, the classification criteria are not met.

### Sensitisation

## SECTION 11: Toxicological information

| Product/ingredient name | Route of exposure | Species | Result |
|---|---|---|---|
| tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | skin | Guinea pig | Sensitising |

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

**Respiratory** : Based on available data, the classification criteria are not met.

**Mutagenicity**

| Product/ingredient name | Test | Experiment | Result |
|---|---|---|---|
| tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | OECD 471 | Experiment: In vitro<br>Subject: Bacteria | Negative |
| | OECD 473 | Experiment: In vitro<br>Subject: Mammalian-Animal | Negative |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Carcinogenicity**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Reproductive toxicity**

| Product/ingredient name | Maternal toxicity | Fertility | Developmental toxin | Species | Dose | Exposure |
|---|---|---|---|---|---|---|
| hydrocarbons, aromatic, C9 | - | - | Negative | Mammal - species unspecified | Route of exposure unreported | - |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Teratogenicity**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

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

| Product/ingredient name | Category | Route of exposure | Target organs |
|---|---|---|---|
| hydrocarbons, aromatic, C9 | Category 3 | - | Respiratory tract irritation |
| | Category 3 | | Narcotic effects |
| diethyl fumarate | Category 3 | - | Respiratory tract irritation |
| diethyl fumarate | Category 3 | - | Respiratory tract irritation |

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

Not available.

**Aspiration hazard**

| Product/ingredient name | Result |
|---|---|
| hydrocarbons, aromatic, C9 | ASPIRATION HAZARD - Category 1 |
| pine oil | ASPIRATION HAZARD - Category 1 |
| Turpentine, oil | ASPIRATION HAZARD - Category 1 |

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

**Potential acute health effects**

**Eye contact** : Causes serious eye irritation.

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

# SECTION 11: Toxicological information

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

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

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

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : No specific data.

**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

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| tetraethylN,N'-(methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | Sub-acute NOAEL Oral | Rat | 1000 mg/kg | - |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**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.

## 11.2 Information on other hazards

### 11.2.1 Endocrine disrupting properties

Not available.

### 11.2.2 Other information

Not available.

# SECTION 12: Ecological information

## 12.1 Toxicity

# SECTION 12: Ecological information

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| bis(4-(1,2-bis (ethoxycarbonyl)ethylamino) -3-methylcyclohexyl)methane | Chronic NOEC 0,01 mg/l | Daphnia spec. | 21 days |
| tetraethylN,N'-( methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | Acute EC50 88,6 mg/l | Daphnia spec. | 48 hours |
| | Acute IC50 113 mg/l | Algae - *Scenedesmus subspicatus* | 72 hours |
| | Acute LC50 66 mg/l | Fish | 96 hours |
| | Chronic NOEC 0,01 mg/l | Daphnia spec. | 21 days |
| diethyl fumarate | Acute LC50 4500 µg/l Fresh water | Fish - *Pimephales promelas* | 96 hours |
| diethyl fumarate | Acute LC50 4500 µg/l Fresh water | Fish - *Pimephales promelas* | 96 hours |
| pine oil | Acute EC50 24,5 ppm Fresh water | Daphnia spec. - *Daphnia magna* | 48 hours |
| | Acute LC50 18,35 ppm Fresh water | Fish - *Oncorhynchus mykiss* - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| Turpentine, oil | Acute EC50 17 mg/l | Algae | 72 hours |
| | Acute EC50 8,8 mg/l | Daphnia spec. | 48 hours |
| | Acute LC50 29 mg/l | Fish | 96 hours |

**Conclusion/Summary** : Harmful to aquatic life with long lasting effects.

## 12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|---|---|---|---|
| bis(4-(1,2-bis (ethoxycarbonyl)ethylamino) -3-methylcyclohexyl)methane | OECD 301F | 13 % - 28 days | - | - |
| tetraethylN,N'-( methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | OECD 301F | 13 % - Not readily - 28 days | - | - |
| | OECD 302C | 0 % - Not readily - 28 days | - | - |

**Conclusion/Summary** : This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| bis(4-(1,2-bis (ethoxycarbonyl)ethylamino) -3-methylcyclohexyl)methane | - | - | Not readily |
| tetraethylN,N'-( methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | Fresh water 28 days, pH 4, 25°C (OECD 111) | - | Not readily |
| | Fresh water 1 days, pH 7, 25°C (OECD 111) | | |
| | Fresh water 0,7 days, pH 9, 25°C (OECD 111) | | |
| hydrocarbons, aromatic, C9 | - | - | Readily |
| butyl glycollate | - | - | Readily |

## 12.3 Bioaccumulative potential

## SECTION 12: Ecological information

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| bis(4-(1,2-bis (ethoxycarbonyl)ethylamino) -3-methylcyclohexyl)methane | 5,99 | 0,25 | Low |
| tetraethylN,N'-( methylenedicyclohexane-4,1-diyl) bis-dl-aspartate | 5,16 | 0,25 | Low |
| hydrocarbons, aromatic, C9 | 3.7 to 4.5 | 10 to 2500 | High |
| butyl glycollate | 0,38 | - | Low |
| Turpentine, oil | 4,5 | - | High |

### 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 Endocrine disrupting properties

Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

### 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.

**European waste catalogue (EWC)**

| Waste code | Waste designation |
|---|---|
| 10 13 11 | wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10 |

**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. 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 or ID number** | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| **14.2 UN proper shipping name** | - | - | - | - |
| **14.3 Transport hazard class(es)** | - | - | - | - |
| **14.4 Packing group** | - | - | - | - |
| **14.5 Environmental hazards** | No. | No. | No. | No. |
| | | | | |

**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

**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorisation**

**Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

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

| Product/ingredient name | % | Designation [Usage] |
|---|---|---|
| Concrex Sub Zero - Resin | ≥90 | 3 |

**Labelling** : Not applicable.

**Other EU regulations**

**VOC for Ready-for-Use Mixture** : IIA/j. Two-pack reactive performance coatings for specific end use such as floors. EU limit value for this product : 500g/l (2010.)
This product contains a maximum of 30 g/l VOC.

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

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

## SECTION 15: Regulatory information

**Explosive precursors** : Not applicable.

**EU - Ozone depleting substances**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EC)**

Not listed.

**Persistent Organic Pollutants (850/2004/EC)**

Not listed.

**Seveso Directive**

This product is not controlled under the Seveso Directive.

**Ireland**

**Biocidal products regulation** : Not applicable.

**References** : Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 (S.I. No. 619 of 2001)
Safety, Health and Welfare at Work (Carcinogens) Regulations 2001 (S.I. No. 78 of 2001)
Safety, Health and Welfare at Work (General Application) Regulations 2007
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**International regulations**

**Stockholm Convention on Persistent Organic Pollutants**

| List name | Ingredient name | Status |
|---|---|---|
| Not listed. | | |

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

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

| List name | Ingredient name | Status |
|---|---|---|
| Not listed. | | |

**CN code** : 3214 10 10 00

**Inventory list**

**Australia** : Not determined.

**Canada** : Not determined.

**China** : Not determined.

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

**Japan** : **Japan inventory (CSCL)**: Not determined.
**Japan inventory (ISHL)**: Not determined.

**New Zealand** : Not determined.

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

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

**Taiwan** : Not determined.

**Thailand** : Not determined.

**Turkey** : Not determined.

**United States** : At least one component is not listed.

## SECTION 15: Regulatory information

**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
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
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 according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

| Classification | Justification |
|---|---|
| Eye Irrit. 2, H319 | Calculation method |
| Skin Sens. 1, H317 | Calculation method |
| Aquatic Chronic 3, H412 | Calculation method |

**Full text of abbreviated H statements**

**Ireland**

**Full text of abbreviated H statements** :

| | |
|---|---|
| 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. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

**Full text of classifications [CLP/GHS]** :

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

**Date of printing** : 1/12/2024

## SECTION 16: Other information

**Date of issue/ Date of revision** : 30/11/2024

**Date of previous issue** : No previous validation

**Version** : 1

**Notice to reader**

**IMPORTANT NOTE: The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates. Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.**

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