

# SAFETY DATA SHEET

Test Standard, Specs DB-WAX (Capillary)

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

### 1.1 Product identifier

**Product name** : Test Standard, Specs DB-WAX (Capillary)  
**Part no.** : 200-0370

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

**Identified uses** : Reagents and Standards for Analytical Chemistry Laboratory Use  
A 1 ml. ampoule  
**Uses advised against** : None known.

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

Agilent Technologies LDA UK Ltd.  
5500 Lakeside Cheadle Royal Business Park,  
Cheadle, Cheshire, SK8 3GR  
United Kingdom  
Tel: +44 (0) 345 712 5292  
**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

### 1.4 Emergency telephone number

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +44 20 3807 3798

## 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]

|      |                                                                                    |             |
|------|------------------------------------------------------------------------------------|-------------|
| H225 | FLAMMABLE LIQUIDS                                                                  | Category 2  |
| H302 | ACUTE TOXICITY (oral)                                                              | Category 4  |
| H315 | SKIN CORROSION/IRRITATION                                                          | Category 2  |
| H319 | SERIOUS EYE DAMAGE/EYE IRRITATION                                                  | Category 2  |
| H350 | CARCINOGENICITY                                                                    | Category 1B |
| H335 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE<br>(Respiratory tract irritation) | Category 3  |
| H304 | ASPIRATION HAZARD                                                                  | Category 1  |

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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

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

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

SECTION 2: Hazards identification

|                                                                                                                                           |                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hazard statements</b>                                                                                                                  | : H225 - Highly flammable liquid and vapour.<br>H302 - Harmful if swallowed.<br>H304 - May be fatal if swallowed and enters airways.<br>H315 - Causes skin irritation.<br>H319 - Causes serious eye irritation.<br>H335 - May cause respiratory irritation.<br>H350 - May cause cancer. |
| <b>Precautionary statements</b>                                                                                                           |                                                                                                                                                                                                                                                                                         |
| <b>Prevention</b>                                                                                                                         | : P201 - Obtain special instructions before use.<br>P280 - Wear protective gloves, protective clothing and eye or face protection.<br>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.                                             |
| <b>Response</b>                                                                                                                           | : P308 + P313 - IF exposed or concerned: Get medical advice or attention.                                                                                                                                                                                                               |
| <b>Storage</b>                                                                                                                            | : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.                                                                                                                                                                                                        |
| <b>Disposal</b>                                                                                                                           | : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.                                                                                                                                                              |
| <b>Hazardous ingredients</b>                                                                                                              | : 1,2-dichloroethane                                                                                                                                                                                                                                                                    |
| <b>Supplemental label elements</b>                                                                                                        | : Not applicable.                                                                                                                                                                                                                                                                       |
| <b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b> | : Restricted to professional users.                                                                                                                                                                                                                                                     |
| <b>Special packaging requirements</b>                                                                                                     |                                                                                                                                                                                                                                                                                         |
| <b>Containers to be fitted with child-resistant fastenings</b>                                                                            | : Not applicable.                                                                                                                                                                                                                                                                       |
| <b>Tactile warning of danger</b>                                                                                                          | : Not applicable.                                                                                                                                                                                                                                                                       |

2.3 Other hazards

|                                                                                                          |                                                                                         |
|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <b>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</b> | : This mixture does not contain any substances that are assessed to be a PBT or a vPvB. |
| <b>Other hazards which do not result in classification</b>                                               | : None known.                                                                           |

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers                                           | %   | Classification                                                                                                                                                                                         | Type           |
|-------------------------|-------------------------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1,2-dichloroethane      | EC: 203-458-1<br>CAS: 107-06-2<br>Index: 602-012-00-7 | ≥90 | Flam. Liq. 2, H225<br>Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Carc. 1B, H350<br>STOT SE 3, H335<br><br>See Section 16 for the full text of the H statements declared above. | [1] [2]<br>[3] |

**SECTION 3: Composition/information on ingredients**

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

Type

- ☒ [1] Substance classified with a health or environmental hazard  
 [2] Substance with a workplace exposure limit  
 [3] Substance with carcinogenic, mutagenic or reproductive toxicity properties

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 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. 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** : Flush contaminated skin with plenty of 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. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness
- Inhalation** : Adverse symptoms may include the following:  
 respiratory tract irritation  
 coughing
- Skin contact** : Adverse symptoms may include the following:  
 irritation  
 redness
- Ingestion** : Adverse symptoms may include the following:  
 nausea or vomiting

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

## SECTION 4: First aid measures

- 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 dry chemical, CO<sub>2</sub>, 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** : Highly 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  
halogenated compounds  
carbonyl halides

### 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to British standard BS 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. 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

- Methods for cleaning up** : 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.

**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****7.1 Precautions for safe handling**

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. 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. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Avoid contact with eyes, skin and clothing. Do not ingest. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not swallow.
- 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**

- Storage** : 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 |
|-------------------|---------------------------------|-------------------------|
| P <sub>50</sub> c | 5000 tonnes                     | 50000 tonnes            |

**7.3 Specific end use(s)**

- Recommendations** : Industrial applications, Professional applications.
- 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                                                                                                                   |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 1,2-dichloroethane      | EH40/2005 WELs (United Kingdom (UK), 1/2020) Carc. Absorbed through skin.<br>TWA 8 hours: 5 ppm.<br>TWA 8 hours: 21 mg/m <sup>3</sup> . |

**Biological exposure indices**

**SECTION 8: Exposure controls/personal protection**

No exposure indices known.

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS 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****Result**

1,2-dichloroethane

DMEL - General population - Long term - Inhalation 2.9 µg/m<sup>3</sup>DMEL - Workers - Long term - Inhalation 6.6 mg/m<sup>3</sup>

DMEL - Workers - Long term - Dermal 62.4 mg/kg bw/day

**PNECs**

Not available.

**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. 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: chemical splash goggles.

**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.

**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. Refer to British Standard BS EN 1149 for further information on material and design requirements and test methods.

**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.

SECTION 8: Exposure controls/personal protection

**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** : Clear.  
**Odour** : Chloroform. [Slight]  
**Odour threshold** : Not available.  
**Melting point/freezing point** : -35.5°C  
**Initial boiling point and boiling range** : 83°C  
**Flammability** : Not applicable.  
**Lower and upper explosion limit/flammability limit** : Lower: 6.2%  
Upper: 16%  
**Flash point** : Closed cup: -18 to 23°C  
**Auto-ignition temperature** :

| Ingredient name    | °C  | Method    |
|--------------------|-----|-----------|
| 1,2-dichloroethane | 440 | DIN 51794 |

**Decomposition temperature** : Not available.

**pH** : Not available.

**Viscosity** : Dynamic (room temperature): Not available.  
Kinematic (room temperature): Not available.  
Kinematic (40°C): Not available.

| Media | Result    |
|-------|-----------|
| water | Insoluble |

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

**Vapour pressure** : 8.3 kPa (62 mm Hg)

**Relative density** : Not available.

**Vapour density** : 3.42 [Air = 1]

Particle characteristics

**Median particle size** : Not applicable.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

**Explosive properties** : Not available.

**Oxidising properties** : Not available.

9.2.2 Other safety characteristics

**Miscible with water** : No.

**Evaporation rate** : Not available.

**Physical/chemical properties comments** : Not available.

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                 |            |
|-------------------------|------------------------|------------|
| 1,2-dichloroethane      | Rat - Oral - LD50      | 500 mg/kg  |
|                         | Rabbit - Dermal - LD50 | 2800 mg/kg |

Conclusion/Summary : Not available.  
[Product]

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) |
|---------------------------------------------------------------|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| Test Standard, Specs DB-WAX (Capillary)<br>1,2-dichloroethane | 500.8<br>500 | N/A<br>2800    | N/A<br>N/A               | N/A<br>N/A                  | N/A<br>N/A                          |

Skin corrosion/irritation

| Product/ingredient name | Result                        |                                                                                         |
|-------------------------|-------------------------------|-----------------------------------------------------------------------------------------|
| 1,2-dichloroethane      | Rabbit - Skin - Mild irritant | Duration of treatment/<br>exposure: 24 hours<br>Amount/concentration<br>applied: 500 mg |
|                         | Rabbit - Skin - Mild irritant | Amount/concentration<br>applied: 625 mg                                                 |

Conclusion/Summary : Repeated exposure may cause skin dryness or cracking.  
[Product]

Serious eye damage/eye irritation

| Product/ingredient name | Result                          |                                                                                         |
|-------------------------|---------------------------------|-----------------------------------------------------------------------------------------|
| 1,2-dichloroethane      | Rabbit - Eyes - Mild irritant   | Duration of treatment/<br>exposure: 24 hours<br>Amount/concentration<br>applied: 500 mg |
|                         | Rabbit - Eyes - Severe irritant | Amount/concentration<br>applied: 63 mg                                                  |

Conclusion/Summary : Not available.  
[Product]

**SECTION 11: Toxicological information**Respiratory corrosion/irritation

**Conclusion/Summary** : Not available.  
**[Product]**

Respiratory or skin sensitization**Skin**

**Conclusion/Summary** : Not available.  
**[Product]**

**Respiratory**

**Conclusion/Summary** : Not available.  
**[Product]**

Germ cell mutagenicity

**Conclusion/Summary** : Not available.  
**[Product]**

Carcinogenicity

**Conclusion/Summary** : Not available.  
**[Product]**

Reproductive toxicity

**Conclusion/Summary** : Not available.  
**[Product]**

Specific target organ toxicity (single exposure)

| Product/ingredient name | Result                                         |
|-------------------------|------------------------------------------------|
| 1,2-dichloroethane      | STOT SE 3, H335 (Respiratory tract irritation) |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

| Product/ingredient name                 | Result                         |
|-----------------------------------------|--------------------------------|
| Test Standard, Specs DB-WAX (Capillary) | ASPIRATION HAZARD - Category 1 |

**Information on likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : May cause respiratory irritation.  
**Skin contact** : Causes skin irritation.  
**Ingestion** : Harmful if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : Adverse symptoms may include the following:  
 respiratory tract irritation  
 coughing

SECTION 11: Toxicological information

- Skin contact

: Adverse symptoms may include the following:  
irritation  
redness
- Ingestion

: Adverse symptoms may include the following:  
nausea or vomiting

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

- Conclusion/Summary [Product]

: Not available.
- General

: No known significant effects or critical hazards.
- Carcinogenicity

: May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity

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

: No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name                                                                               | Result                                                             |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
|  1,2-dichloroethane | Acute - LC50 - Fresh water -                                       |
|                                                                                                       | Fish - Largemouth bass - <i>Micropterus salmoides</i> - Fingerling |
|                                                                                                       | Size: 35 to 75 mm                                                  |
|                                                                                                       | 66 ppm [96 hours]                                                  |
|                                                                                                       | Mortality                                                          |
|                                                                                                       | Acute - EC50 - Fresh water -                                       |
|                                                                                                       | OECD                                                               |
|                                                                                                       | Algae - Green algae - <i>Desmodesmus subspicatus</i>               |
|                                                                                                       | 166 ppm [96 hours]                                                 |
|                                                                                                       | Population                                                         |
|                                                                                                       | Acute - EC50 - Fresh water -                                       |
|                                                                                                       | OECD                                                               |
|                                                                                                       | Daphnia - Water flea - <i>Daphnia magna</i>                        |
|                                                                                                       | Age: ≤24 hours                                                     |
|                                                                                                       | 99.4 mg/l [48 hours]                                               |
|                                                                                                       | Intoxication                                                       |
|                                                                                                       | Chronic - NOEC - Fresh water -                                     |

**SECTION 12: Ecological information**

OECD  
Daphnia - Water flea -  
*Daphnia magna*  
Age: ≤24 hours  
1.02 mg/l [21 days]  
Reproduction

**Conclusion/Summary** : Not available.  
**[Product]**

**12.2 Persistence and degradability**

**Conclusion/Summary** : Not available.  
**[Product]**

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| 1,2-dichloroethane      | -                 | -          | Inherent         |

**12.3 Bioaccumulative potential**

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| 1,2-dichloroethane      | 1.45               | 2   | Low       |

**12.4 Mobility in soil**

Soil/water partition coefficient

| Product/ingredient name | logK <sub>oc</sub> | K <sub>oc</sub> |
|-------------------------|--------------------|-----------------|
| 1,2-dichloroethane      | 1.5                | 33.1086         |

**Results of PMT and vPvM assessment**

| Product/ingredient name | PMT | P  | M  | T  | vPvM | vP | vM |
|-------------------------|-----|----|----|----|------|----|----|
| 1,2-dichloroethane      | No  | No | No | No | No   | No | No |

**Mobility** : Not available.

**Conclusion/Summary** : The product does not meet the criteria to be considered as a PMT or vPvM.

**12.5 Results of PBT and vPvB assessment**

Regulation (EC) No. 1907/2006 [REACH]

| Product/ingredient name | PBT | P   | B  | T   | vPvB | vP  | vB |
|-------------------------|-----|-----|----|-----|------|-----|----|
| 1,2-dichloroethane      | No  | N/A | No | Yes | No   | N/A | No |

Regulation (EC) No. 1272/2008 [CLP]

| Product/ingredient name | PBT | P  | B  | T  | vPvB | vP | vB |
|-------------------------|-----|----|----|----|------|----|----|
| 1,2-dichloroethane      | No  | No | No | No | No   | No | No |

**Conclusion/Summary** : The product does not meet the criteria to be considered as a PBT or vPvB.

Regulation (EC) No.  
1272/2008 [CLP]

**12.6 Endocrine disrupting properties**

Not available.

**Conclusion/Summary** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.  
**[Product]**

**12.7 Other adverse effects**

No known significant effects or critical hazards.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

**Methods of disposal** : 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. The generation of waste should be avoided or minimised wherever possible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

**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                                                                                                                                                                            | IMDG                                                                                                                                                                               | IATA                                                                                                                                                                                   |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>14.1 UN number</b>                  | UN1184                                                                                                                                                                             | UN1184                                                                                                                                                                             | UN1184                                                                                                                                                                                 |
| <b>14.2 UN proper shipping name</b>    | ETHYLENE DICHLORIDE solution                                                                                                                                                       | ETHYLENE DICHLORIDE solution                                                                                                                                                       | Ethylene dichloride solution                                                                                                                                                           |
| <b>14.3 Transport hazard class(es)</b> | 3 (6.1)<br>  | 3 (6.1)<br>  | 3 (6.1)<br>  |
| <b>14.4 Packing group</b>              | II                                                                                                                                                                                 | II                                                                                                                                                                                 | II                                                                                                                                                                                     |
| <b>14.5 Environmental hazards</b>      | No.                                                                                                                                                                                | No.                                                                                                                                                                                | No.                                                                                                                                                                                    |

**Additional information**

**Remarks:** De minimis quantities

**ADR/RID** : **Hazard identification number** 336  
**Limited quantity** 1 L  
**Tunnel code** (D/E)

**IMDG** : **Emergency schedules** F-E, S-D

**IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 1 L. Packaging instructions: 352. Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y341.

**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**

| Intrinsic property                                                                           | Ingredient name    | Status | Reference number | Date of revision |
|----------------------------------------------------------------------------------------------|--------------------|--------|------------------|------------------|
|  Carcinogen | 1,2-dichloroethane | Listed | 26               | 1/1/2021         |

**Substances of very high concern**

| Intrinsic property                                                                           | Ingredient name    | Status    | Reference number | Date of revision |
|----------------------------------------------------------------------------------------------|--------------------|-----------|------------------|------------------|
|  Carcinogen | 1,2-dichloroethane | Candidate | -                | 12/19/2011       |

**Ozone depleting substances**

Not listed.

**Prior Informed Consent (PIC)**

| Part   | Ingredient name     | Status |
|--------|---------------------|--------|
| Part 1 | 1,2-dichloroethane  | Listed |
| Part 3 | ethylene dichloride | 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** None of the components are listed / The components are not impacted by a restriction**Labelling** : Restricted to professional users.**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 |
|--------------------------------------------------------------------------------------------------------|----------------|--------------|----------------|-------|
|  1,2-dichloroethane | EH40/2005 WELs | -            | Carc           | -     |

**EU regulations****Industrial emissions (integrated pollution prevention and control) - Air** : Not listed**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments might still be required.**International regulations****Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

**SECTION 15: Regulatory information**

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

| List name | Ingredient name                                                                      | Status |
|-----------|--------------------------------------------------------------------------------------|--------|
| Pesticide | Ethylene dichloride (ISO); Borer-Sol;<br>1,2-Dichloroethane; 1,2-Bichloroethane; EDC | Listed |

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list**United States** : All components are active or exempted.**SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms**

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
 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  
 IATA = International Air Transport Association  
 IMDG = International Maritime Dangerous Goods  
 IMO = International Maritime Organization  
 N/A = Not available  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
 RRN = REACH Registration Number  
 SGG = Segregation Group  
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

| Classification                                                                                                                                  | Justification                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flam. Liq. 2, H225<br>Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Carc. 1B, H350<br>STOT SE 3, H335<br>Asp. Tox. 1, H304 | On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Expert judgment |

Full text of abbreviated H statements

|                                                      |                                                                                                                                                                                                                                      |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| H225<br>H302<br>H304<br>H315<br>H319<br>H335<br>H350 | Highly flammable liquid and vapour.<br>Harmful if swallowed.<br>May be fatal if swallowed and enters airways.<br>Causes skin irritation.<br>Causes serious eye irritation.<br>May cause respiratory irritation.<br>May cause cancer. |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Full text of classifications

SECTION 16: Other information

|               |                                                               |
|---------------|---------------------------------------------------------------|
| Acute Tox. 4  | ACUTE TOXICITY - Category 4                                   |
| Asp. Tox. 1   | ASPIRATION HAZARD - Category 1                                |
| Carc. 1B      | CARCINOGENICITY - Category 1B                                 |
| Eye Irrit. 2  | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2                |
| Flam. Liq. 2  | FLAMMABLE LIQUIDS - Category 2                                |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2                        |
| STOT SE 3     | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

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