SAFETY DATA SHEET

Date of issue/Date of revision

: 1 February 2024

Version

: 12.03

Qatar



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

| 1.1 Product identifier | |
|------------------------|------------------------|
| Product name | : SIGMAZINC 158 BINDER |
| Product code | : 00142716 |

Other means of identification

Not available.

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

| Product use | : Professional applications, Used by spraying. |
|----------------------------------|---|
| Use of the substance/ mixture | : Coating. |
| Uses advised against | : Product is not intended, labelled or packaged for consumer use. |

1.3 Details of the supplier of the safety data sheet

| Sigma Paint Saudi Arabia Ltd. PO Box 7509 Dammam 31472 Saudi Arabia Tel: 00966 138 47 3100 Fax: 00966 138471734 e-mail address of person responsible for this SDS | : ndpic@sfda.gov.sa |
|--|-----------------------------|
| 1.4 Emergency telephone number | : 00966 138473100 extn 1001 |

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] Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1B, H360FD STOT SE 3, H335 STOT SE 3, H336 STOT RE 2, H373

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

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| SECTION 2: Hazards | identification |
| Hazard pictograms | |
| Signal word | : Danger |
| Hazard statements | Highly flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May damage fertility. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure. |
| Precautionary statements | |
| Prevention | : Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do no breathe vapour. |
| Response | : IF exposed or concerned: Get medical advice or attention. |
| Storage | : Store in a well-ventilated place. Keep container tightly closed. |
| Disposal | Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P260, P308 + P313, P403 + P233, P501 |
| Hazardous ingredients | Prethoxy-2-propanol xylene tetraethyl silicate crystalline silica, respirable powder (<10 microns) trimethyl borate |
| Supplemental label elements | : Not applicable. |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : Restricted to professional users. |
| Special packaging requirem | <u>ients</u> |
| 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 | : 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 | : Prolonged or repeated contact may dry skin and cause irritation. |

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Туре |
|--|---|-----------------|--|--|---------|
| r frethoxy-2-propanol | REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3 | ≥10 - ≤25 | Flam. Liq. 3, H226 STOT SE 3, H336 | - | [1] [2] |
| xylene | EC: 215-535-7 CAS: 1330-20-7 | ≥10 - ≤21 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412 | ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |
| tetraethyl silicate | REACH #: 01-2119496195-28 EC: 201-083-8 CAS: 78-10-4 Index: 014-005-00-0 | ≥1.0 - ≤5.0 | Flam. Liq. 3, H226 Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT SE 3, H335 | ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |
| ethylbenzene | REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4 | ≥1.0 - ≤3.7 | Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412 | ATE [Inhalation (vapours)] = 17.8 mg/l | [1] [2] |
| crystalline silica, respirable powder (<10 microns) | EC: 238-878-4 CAS: 14808-60-7 | ≥1.0 - ≤5.0 | STOT RE 1, H372 (inhalation) | - | [1] [2] |
| methanol | REACH #: 01-2119433307-44 EC: 200-659-6 CAS: 67-56-1 Index: 603-001-00-X | ≥0.10 - ≤2.2 | Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 | ATE [Oral] = 100 mg/ kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (vapours)] = 3 mg/l STOT SE 1, H370: C ≥ 10% STOT SE 2, H371: $3\% \le C < 10\%$ | [1] [2] |
| trimethyl borate | EC: 204-468-9 CAS: 121-43-7 Index: 005-005-00-1 | <1.0 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Eye Irrit. 2, H319 Repr. 1B, H360FD (oral) STOT SE 1, H370 (optic nerve) See Section 16 for the full text of the H statements declared above. | ATE [Dermal] = 1980 mg/kg | [1] [2] |

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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.

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

Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

| Eye contact | : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. | |
|----------------------------|---|--|
| Inhalation | : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by traine personnel. | |
| Skin contact | Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners. | |
| Ingestion | : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting. | |
| Protection of first-aiders | : No action shall be taken involving any personal risk or without suitable training. 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 t give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with wate before removing it, or wear gloves. | |

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects Eye contact : Causes serious eye irritation. Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. **Skin contact** : Causes skin irritation. Defatting to the skin. Ingestion : Can cause central nervous system (CNS) depression. 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 nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced foetal weight increase in foetal deaths skeletal malformations

| Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 | | | | |
|--|---|-------------------|--|--|
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| SECTION 4: First ai | d measures | | | |
| Skin contact | : Adverse symptoms may include the following: irritation redness dryness cracking reduced foetal weight increase in foetal deaths skeletal malformations | | | |

Ingestion : Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

| 5.1 Extinguishing media | |
|--|---|
| Suitable extinguishing media | : Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Unsuitable extinguishing media | : Do not use water jet. |
| 5.2 Special hazards arising f | 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. |
| Hazardous combustion products | : Decomposition products may include the following materials: carbon oxides metal oxide/oxides |
| 5.3 Advice for firefighters | |
| Special precautions 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 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. Shut off all ignition sources flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provid adequate ventilation. Wear appropriate respirator when ventilation is inadequate. on appropriate personal protective equipment. | . No le |
|---|------------|
|---|------------|

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SECTION 6: Accidental release measures

| 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 | co | ntainment and cleaning up |
| Small spill | - | Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| Large spill | : | Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product. |
| 6.4 Reference to other sections | : | See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information. |

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

| Protective measures | : | Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. | | not in eyes with te. Do ep in the kept me or nd ry |
|--|---|--|--|--|
| Advice on general occupational hygiene | : | Eating, drinking and smoking should be prohibited handled, stored and processed. Workers should we drinking and smoking. Remove contaminated cloth entering eating areas. See also Section 8 for addite measures. | vash hands and face before hing and protective equipme | eating, nt before |
| 7.2 Conditions for safe storage, including any incompatibilities | : | Store between the following temperatures: 0 to 35° with local regulations. Store in a segregated and a container protected from direct sunlight in a dry, co from incompatible materials (see Section 10) and f Eliminate all ignition sources. Separate from oxidis closed and sealed until ready for use. Containers to carefully resealed and kept upright to prevent leaka containers. Use appropriate containment to avoid | pproved area. Store in origi ool and well-ventilated area, a food and drink. Store locked sing materials. Keep contair that have been opened must age. Do not store in unlabell | nal away l up. ner tightly t be led |
| | | English (GB) | Qatar | 6/15 |

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SECTION 7: Handling and storage

Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

| of hazardous substances will also be required. |
|--|
| 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 : 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. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. |
| Gloves : |

| onforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) | | | | |
|--|--|--|--|--|
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| | For prolonged or repeated handling, use the following type of gloves: | | | |
| | Recommended: polyvinyl alcohol (PVA), Viton®, butyl rubber May be used: nitrile rubber | | | |
| Body protection | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard 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 | | | | |
| Environmental exposure controls | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. | | | |

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

| Appearance | | | | | | | | |
|--|---|--|-------------------------------------|----------|----------------|-----------|-----------|--------------|
| Physical state | : | Liquid. | | | | | | |
| Colour | : | Colourless. | olourless. | | | | | |
| Odour | : | Characteristic. | | | | | | |
| Odour threshold | : | Not available. | | | | | | |
| Melting point/freezing point | : | May start to solidify a for the following ingr | | | | | | |
| Initial boiling point and boiling range | : | >37.78°C | 37.78°C | | | | | |
| Flammability | 1 | Not available. | | | | | | |
| Upper/lower flammability or explosive limits | : | Greatest known rang | ge: Lower: | 6% Up | per: 44% (met | thanol) | | |
| Flash point | ÷ | Closed cup: 16.5°C | | | | | | |
| Auto-ignition temperature | | 270°C (518°F) | | | | | | |
| Decomposition temperature | | Stable under recomr | nended st | orage a | nd handling co | onditions | (see Sec | tion 7). |
| рН | 1 | Not applicable. insolu | Not applicable. insoluble in water. | | | | | |
| Viscosity | : | Kinematic (40°C): >2 | Kinematic (40°C): >21 mm²/s | | | | | |
| Solubility(ies) | 1 | | | | | | | |
| Media | | Result | | | | | | |
| cold water | | Not soluble | | | | | | |
| Partition coefficient: n-octanol/ water | : | Not applicable. | | | | | | |
| Vapour pressure | : | | Vapou | ur Press | sure at 20°C | Vapo | our press | sure at 50°C |
| | | Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |
| | | p rethanol | 126.96329 | 16.9 | | | | |
| Evaporation rate | | | | | | | | |

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SECTION 9: Physical and chemical properties

| | Highest known value: 2.1 (methanol) Weighted average: 0.83compared with butyl acetate |
|--------------------------|---|
| Relative density | : 1.18 |
| Vapour density | Highest known value: 7.22 (Air = 1) (tetraethyl silicate). Weighted average: 3.66 (Air = 1) |
| Explosive properties | The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible. |
| Oxidising properties | : Product does not present an oxidizing hazard. |
| Particle characteristics | |
| Median particle size | : Not applicable. |
| | |

9.2 Other information

No additional information.

| SECTION 10: Stability and reactivity | | | | |
|--|---|--|--|--|
| 10.1 Reactivity | : No specific test data related to reactivity available for this product or its ingredients. | | | |
| 10.2 Chemical stability | : The product is stable. | | | |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. | | | |
| 10.4 Conditions to avoid | : When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8. | | | |
| 10.5 Incompatible materials | : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids. | | | |
| 10.6 Hazardous decomposition products | Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides | | | |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|---------------------------|---------|-------------------------|----------|
| I → methoxy-2-propanol | LC50 Inhalation Vapour | Rat | >7000 ppm | 6 hours |
| | LD50 Dermal | Rabbit | 13 g/kg | - |
| | LD50 Oral | Rat | 5.2 g/kg | - |
| xylene | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| - | LD50 Oral | Rat | 4.3 g/kg | - |
| tetraethyl silicate | LC50 Inhalation Dusts and | Rat | 10 to 16 mg/l | 4 hours |
| | mists | | 5 0 7 0 <i>"</i> | |
| | LD50 Dermal | Rabbit | 5.878 g/kg | - |
| | LD50 Oral | Rat | 6270 mg/kg | - |
| ethylbenzene | LC50 Inhalation Vapour | Rat | 17.8 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 17.8 g/kg | - |
| | LD50 Oral | Rat | 3.5 g/kg | - |
| methanol | LC50 Inhalation Vapour | Rat | 64000 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 15800 mg/kg | - |
| | LD50 Oral | Rat | 5600 mg/kg | - |
| trimethyl borate | LD50 Dermal | Rabbit | 1.98 g/kg | - |
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| Conforms 2020/878 | onforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 | | | | |
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| SIGMAZI | NC 158 BINDER | | | | |
| SECTI | ON 11: Toxicological in | oformation | | | |

TION TT. TOXICOlogical information

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

LD50 Oral

Irritation/Corrosion

| Product/ingredier | nt name | Result | Species | Score | Exposure | Observation |
|---------------------------|-------------|----------------------------|----------------|-------|-----------------|-------------|
| x ylene | | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| Conclusion/Summary | | | | | | • |
| Skin | : There are | no data available on the r | nixture itself | | | |
| Eyes | : There are | no data available on the r | nixture itself | | | |
| Respiratory | : There are | no data available on the r | nixture itself | | | |
| Sensitisation | | | | | | |
| Conclusion/Summary | | | | | | |
| Skin | : There are | e no data available on the | mixture itsel | f. | | |
| Respiratory | : There are | e no data available on the | mixture itsel | f. | | |
| Mutagenicity | | | | | | |
| Conclusion/Summary | : There are | e no data available on the | mixture itsel | f. | | |
| Carcinogenicity | | | | | | |
| Conclusion/Summary | : There are | e no data available on the | mixture itsel | f. | | |
| Reproductive toxicity | | | | | | |
| Conclusion/Summary | : There are | e no data available on the | mixture itsel | f. | | |
| Teratogenicity | | | | | | |
| Conclusion/Summary | : There are | e no data available on the | mixture itsel | f. | | |

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|------------------------------|
| 1-methoxy-2-propanol | Category 3 | - | Narcotic effects |
| xylene | Category 3 | - | Respiratory tract irritation |
| tetraethyl silicate | Category 3 | - | Respiratory tract irritation |
| methanol | Category 1 | - | - |
| trimethyl borate | Category 1 | - | optic nerve |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|----------------|
| | Category 2 | - | hearing organs |
| | Category 1 | inhalation | - |

Aspiration hazard

| Product/ingredient name | Result |
|-------------------------|--------------------------------|
| xylene | ASPIRATION HAZARD - Category 1 |
| ethylbenzene | ASPIRATION HAZARD - Category 1 |

Information on likely routes of exposure

```
: Not available.
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Potential acute health effects

| Inhalation | 1 | Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. |
|--------------|---|---|
| Ingestion | 1 | Can cause central nervous system (CNS) depression. |
| Skin contact | 1 | Causes skin irritation. Defatting to the skin. |
| Eye contact | : | Causes serious eye irritation. |

| English | (GB) |
|---------|------|
|---------|------|

6.14 g/kg

-

Rat

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SECTION 11: Toxicological information

| Symptoms related to the physical, chemical and toxicological characteristics | | | | | |
|--|---|--|--|--|--|
| Inhalation | : Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced foetal weight increase in foetal deaths skeletal malformations | | | | |
| Ingestion | : Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations | | | | |
| Skin contact | : Adverse symptoms may include the following: irritation redness dryness cracking reduced foetal weight increase in foetal deaths skeletal malformations | | | | |
| Eye contact | : Adverse symptoms may include the following: pain or irritation watering redness | | | | |
| | cts as well as chronic effects from short and long-term exposure | | | | |
| Short term exposure Potential immediate effects | : Not available. | | | | |
| Potential delayed effects Long term exposure | : Not available. | | | | |
| Potential immediate effects | : Not available. | | | | |
| Potential delayed effects | : Not available. | | | | |
| Potential chronic health effe | <u>ects</u> | | | | |
| Not available. | | | | | |
| Conclusion/Summary | : Not available. | | | | |
| General | : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. | | | | |
| Carcinogenicity | : No known significant effects or critical hazards. | | | | |
| Mutagenicity | : No known significant effects or critical hazards. | | | | |
| Reproductive toxicity | : May damage fertility. May damage the unborn child. | | | | |
| Other information | : Not available. | | | | |
| Prolonged or repeated contac | t may dry skin and cause irritation. Contains . methanol . Cannot be made non-poisonous. | | | | |

Prolonged or repeated contact may dry skin and cause irritation. Contains . methanol . Cannot be made non-poisonous. May be fatal or cause blindness if swallowed. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

11.2 Information on other hazards

English (GB)

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SECTION 11: Toxicological information

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|--|-----------------------------------|----------------------|
| ✓-methoxy-2-propanol | Acute LC50 23300 mg/l Acute LC50 >4500 mg/l | Daphnia Fish | 48 hours 96 hours |
| ethylbenzene | Fresh water Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh | Daphnia Daphnia - | 48 hours |
| methanol | water Acute LC50 13 mg/l Fresh water | <i>Ceriodaphnia dubia</i> Fish | 96 hours |

Conclusion/Summary

: There are no data available on the mixture itself.

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|-------------------------|------|--------------------------|------|----------|
| ethylbenzene | - | 79 % - Readily - 10 days | - | - |
| Conclusion/Summary | | | | |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--------------------------------------|-------------------|------------|--------------------|
| <mark>i≪</mark> lene ethylbenzene | - | - | Readily Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-------------|-----------|
| I → methoxy-2-propanol | <1 | - | Low |
| xylene | 3.12 | 7.4 to 18.5 | Low |
| tetraethyl silicate | 3.18 | - | Low |
| ethylbenzene | 3.6 | 79.43 | Low |
| methanol | -0.77 | - | Low |
| trimethyl borate | -1.9 | - | Low |

| 12.4 Mobility in soil | |
|--|------------------|
| Soil/water partition coefficient (Koc) | : 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.

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SECTION 12: Ecological information

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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

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

Hazardous waste : Yes.

European waste catalogue (EWC)

| Waste code | Waste designation |
|------------|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances |

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

| Type of packaging | European waste catalogue (EWC) | | |
|---------------------|---|---|--|
| Container | 15 01 06 | mixed packaging | |
| Special precautions | taken when Empty conta residues ma Do not cut, v | al and its container must be disposed of in a safe way. Care should be handling emptied containers that have not been cleaned or rinsed out. ainers or liners may retain some product residues. Vapour from product by create a highly flammable or explosive atmosphere inside the container. weld or grind used containers unless they have been cleaned thoroughly word dispersal of spilt material and runoff and contact with soil, waterways, sewers. | |

SECTION 14: Transport information

| | ADR/RID | IMDG | ΙΑΤΑ |
|------------------------------------|-----------------|-----------------|-----------------|
| 14.1 UN number or ID number | UN1263 | UN1263 | UN1263 |
| 14.2 UN proper shipping name | PAINT | PAINT | PAINT |
| 14.3 Transport hazard class(es) | 3 | 3 | 3 |
| 14.4 Packing group | 11 | 11 | 11 |
| 14.5 Environmental hazards | No. | No. | No. |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. |

Additional information

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SECTION 14: Transport information

| ADR/RID | : None identified. |
|-------------|--------------------|
| Tunnel code | : (D/E) |
| IMDG | : None identified. |
| ΙΑΤΑ | : None identified. |
| | |

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are user 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 | : Not applicable. |
|------------------------|-------------------|
| according to IMO | |
| instruments | |

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 : Restricted to professional users.

on the manufacture, placing on the market

and use of certain

dangerous substances,

mixtures and articles

Other national and international regulations.

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

15.2 Chemical safety : No Chemical Safety Assessment has been carried out.

assessment

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] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number | |
|--|--|--|
| Full text of abbreviated H statements | H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H301 Toxic if swallowed. H304 May be fatal if swallowed and enters airways. H311 Toxic in contact with skin. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. | |

| Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 | | | | |
|--|---|--|--|--|
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| | H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H360FD May damage fertility. May damage the unborn child. H370 Causes damage to organs. H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects. | | | |
| Full text of classifications [CLP/GHS] | H412Harmul to aduatic life with long lasting effects.: Acute Tox. 3ACUTE TOXICITY - Category 3Acute Tox. 4ACUTE TOXICITY - Category 4Aquatic Chronic 3LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3Asp. Tox. 1ASPIRATION HAZARD - Category 1Eye Irrit. 2SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2Flam. Liq. 2FLAMMABLE LIQUIDS - Category 3Repr. 1BREPRODUCTIVE TOXICITY - Category 1BSkin Irrit. 2SKIN CORROSION/IRRITATION - Category 2STOT RE 1SPECIFIC TARGET ORGAN TOXICITY - REPEATEDEXPOSURE - Category 1STOT SE 1STOT SE 1SPECIFIC TARGET ORGAN TOXICITY - SINGLEEXPOSURE - Category 1STOT SE 3STOT SE 3SPECIFIC TARGET ORGAN TOXICITY - SINGLEEXPOSURE - Category 1STOT SE 3STOT SE 3SPECIFIC TARGET ORGAN TOXICITY - SINGLEEXPOSURE - Category 1STOT SE 3STOT SE 3SPECIFIC TARGET ORGAN TOXICITY - SINGLEEXPOSURE - Category 3 | | | |
| <u>History</u> Date of issue/ Date of revision | : 1 February 2024 | | | |
| Date of previous issue | : 19 May 2022 | | | |
| Prepared by | : EHS | | | |
| Version | : 12.03 | | | |

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