

SAFETY DATA SHEET

Date of issue/Date of revision

: 1 February 2024

Version

: 21.07



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

PPG Coatings Belgium BV/SRL

Tweemontstraat 104

B-2100 Deurne

Belgium

Telephone +32-33606311

Fax +32-33606435

e-mail address of person responsible for this SDS : Product.Stewardship.EMEA@ppg.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Numéro de téléphone d'appel d'urgence : 01 45 42 59 59 (Association ORFILA, organisme agréé prévu au 4ème alinéa de l'article L231-7 du code du travail)

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.

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SECTION 2: Hazards identification

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

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 not 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

: 1-methoxy-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 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

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

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SECTION 2: Hazards identification

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % by weight | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|--------------|--|--|---------|
| 2-methoxy-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% ≤ 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) | ATE [Dermal] = 1980 mg/kg | [1] |

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SECTION 3: Composition/information on ingredients

| | | | | | |
|--|--|--|--|--|--|
| | | | STOT SE 1, H370 (optic nerve) See Section 16 for the full text of the H statements declared above. | | |
|--|--|--|--|--|--|

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.

Type

[1] 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 trained 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 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

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

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SECTION 4: First aid measures

- 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
- 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, CO₂, 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.
- 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.

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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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt 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

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SECTION 7: Handling and storage

Advice on general occupational hygiene

and can be hazardous. Do not reuse container.

- : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

- : Store between the following temperatures: 0 to 35°C (32 to 95°F). 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.

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

| Product/ingredient name | Exposure limit values |
|---|--|
| m-methoxy-2-propanol | Ministry of Labor (France, 10/2022). Absorbed through skin. STEL: 375 mg/m ³ 15 minutes. Form: Risk for sensitisation STEL: 100 ppm 15 minutes. Form: Risk for sensitisation TWA: 188 mg/m ³ 8 hours. Form: Risk for sensitisation TWA: 50 ppm 8 hours. Form: Risk for sensitisation |
| xylene | Ministry of Labor (France, 10/2022). [xylenes, mixed isomers, pure] Absorbed through skin. STEL: 442 mg/m ³ 15 minutes. Form: Risk for sensitisation STEL: 100 ppm 15 minutes. Form: Risk for sensitisation TWA: 221 mg/m ³ 8 hours. Form: Risk for sensitisation TWA: 50 ppm 8 hours. Form: Risk for sensitisation |
| tetraethyl silicate | Ministry of Labor (France, 10/2022). TWA: 44 mg/m ³ 8 hours. TWA: 5 ppm 8 hours. |
| ethylbenzene | Ministry of Labor (France, 10/2022). Absorbed through skin. STEL: 442 mg/m ³ 15 minutes. Form: Risk for sensitisation STEL: 100 ppm 15 minutes. Form: Risk for sensitisation TWA: 88.4 mg/m ³ 8 hours. Form: Risk for sensitisation TWA: 20 ppm 8 hours. Form: Risk for sensitisation |
| crystalline silica, respirable powder (<10 microns) | Ministry of Labor (France, 10/2022). TWA: 0.1 mg/m ³ 8 hours. Form: Respirable fraction |
| methanol | Ministry of Labor (France, 10/2022). Absorbed through skin. STEL: 1300 mg/m ³ 15 minutes. Form: Risk for sensitisation STEL: 1000 ppm 15 minutes. Form: Risk for sensitisation TWA: 260 mg/m ³ 8 hours. Form: Risk for sensitisation |

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SECTION 8: Exposure controls/personal protection

TWA: 200 ppm 8 hours. Form: Risk for sensitisation

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

| Product/ingredient name | Type | Exposure | Value | Population | Effects | |
|-------------------------|--------------|-----------------------|-------------------------|------------------------|--------------------|----------|
| m-methoxy-2-propanol | DNEL | Long term Oral | 33 mg/kg bw/day | General population | Systemic | |
| | DNEL | Long term Inhalation | 43.9 mg/m ³ | General population | Systemic | |
| | DNEL | Long term Dermal | 78 mg/kg bw/day | General population | Systemic | |
| | DNEL | Long term Dermal | 183 mg/kg bw/day | Workers | Systemic | |
| | DNEL | Long term Inhalation | 369 mg/m ³ | Workers | Systemic | |
| | DNEL | Short term Inhalation | 553.5 mg/m ³ | Workers | Local | |
| | DNEL | Short term Inhalation | 553.5 mg/m ³ | Workers | Systemic | |
| | xylene | DNEL | Long term Oral | 12.5 mg/kg bw/day | General population | Systemic |
| | | DNEL | Long term Inhalation | 65.3 mg/m ³ | General population | Local |
| | | DNEL | Long term Inhalation | 65.3 mg/m ³ | General population | Systemic |
| | | DNEL | Long term Dermal | 125 mg/kg bw/day | General population | Systemic |
| | | DNEL | Long term Dermal | 212 mg/kg bw/day | Workers | Systemic |
| | | DNEL | Long term Inhalation | 221 mg/m ³ | Workers | Local |
| | | DNEL | Long term Inhalation | 221 mg/m ³ | Workers | Systemic |
| | | DNEL | Short term Inhalation | 260 mg/m ³ | General population | Local |
| | | DNEL | Short term Inhalation | 260 mg/m ³ | General population | Systemic |
| DNEL | | Short term Inhalation | 442 mg/m ³ | Workers | Local | |
| DNEL | | Short term Inhalation | 442 mg/m ³ | Workers | Systemic | |
| tetraethyl silicate | | DNEL | Long term Dermal | 1.8 mg/kg bw/day | General population | Systemic |
| | | DNEL | Short term Inhalation | 5.3 mg/m ³ | General population | Local |
| | | DNEL | Long term Inhalation | 5.3 mg/m ³ | General population | Local |
| | | DNEL | Short term Inhalation | 5.3 mg/m ³ | General population | Systemic |
| | | DNEL | Long term Inhalation | 5.3 mg/m ³ | General population | Systemic |
| | DNEL | Long term Dermal | 6.3 mg/kg bw/day | Workers | Systemic | |
| | DNEL | Short term Inhalation | 44 mg/m ³ | Workers | Local | |
| | DNEL | Long term Inhalation | 44 mg/m ³ | Workers | Local | |
| | DNEL | Short term Inhalation | 44 mg/m ³ | Workers | Systemic | |
| | ethylbenzene | DNEL | Long term Inhalation | 44 mg/m ³ | Workers | Systemic |
| | | DMEL | Long term Inhalation | 442 mg/m ³ | Workers | Local |
| | | DMEL | Short term Inhalation | 884 mg/m ³ | Workers | Systemic |
| | | DNEL | Long term Oral | 1.6 mg/kg bw/day | General population | Systemic |
| | | DNEL | Long term Inhalation | 15 mg/m ³ | General population | Systemic |
| | | DNEL | Long term Inhalation | 77 mg/m ³ | Workers | Systemic |
| | | DNEL | Long term Dermal | 180 mg/kg bw/day | Workers | Systemic |
| DNEL | | Short term Inhalation | 293 mg/m ³ | Workers | Local | |
| methanol | | DNEL | Short term Oral | 4 mg/kg bw/day | General population | Systemic |
| | | DNEL | Long term Oral | 4 mg/kg bw/day | General population | Systemic |
| | | DNEL | Short term Dermal | 4 mg/kg bw/day | General population | Systemic |
| | | DNEL | Long term Dermal | 4 mg/kg bw/day | General population | Systemic |
| | | DNEL | Short term Dermal | 20 mg/kg bw/day | Workers | Systemic |
| | | DNEL | Long term Dermal | 20 mg/kg bw/day | Workers | Systemic |
| | | DNEL | Short term Inhalation | 26 mg/m ³ | General population | Local |
| | | DNEL | Long term Inhalation | 26 mg/m ³ | General population | Local |
| | DNEL | Short term Inhalation | 26 mg/m ³ | General population | Systemic | |

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SECTION 8: Exposure controls/personal protection

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|------------------|------|-----------------------|-----------------------|--------------------|----------|
| trimethyl borate | DNEL | Long term Inhalation | 26 mg/m ³ | General population | Systemic |
| | DNEL | Short term Inhalation | 130 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 130 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 130 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 130 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 8.3 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 392 mg/kg bw/day | Workers | Systemic |

PNECs

| Product/ingredient name | Type | Compartment Detail | Value | Method Detail |
|-------------------------|------|------------------------|-----------------|--------------------------|
| 1-methoxy-2-propanol | - | Fresh water | 10 mg/l | Assessment Factors |
| | - | Marine water | 1 mg/l | Assessment Factors |
| | - | Sewage Treatment Plant | 100 mg/l | Assessment Factors |
| | - | Fresh water sediment | 41.6 mg/kg | Equilibrium Partitioning |
| | - | Marine water sediment | 4.17 mg/kg | Equilibrium Partitioning |
| xylene | - | Soil | 2.47 mg/kg | Equilibrium Partitioning |
| | - | Fresh water | 0.327 mg/l | - |
| | - | Marine water | 0.327 mg/l | - |
| | - | Sewage Treatment Plant | 6.58 mg/l | - |
| | - | Fresh water sediment | 12.46 mg/kg dwt | - |
| ethylbenzene | - | Marine water sediment | 12.46 mg/kg dwt | - |
| | - | Soil | 2.31 mg/kg | - |
| | - | Fresh water | 0.1 mg/l | Assessment Factors |
| | - | Marine water | 0.01 mg/l | Assessment Factors |
| | - | Sewage Treatment Plant | 9.6 mg/l | Assessment Factors |
| methanol | - | Fresh water sediment | 13.7 mg/kg dwt | Equilibrium Partitioning |
| | - | Marine water sediment | 1.37 mg/kg dwt | Equilibrium Partitioning |
| | - | Soil | 2.68 mg/kg dwt | Equilibrium Partitioning |
| | - | Secondary Poisoning | 20 mg/kg | - |
| | - | Fresh water | 20.8 mg/l | Assessment Factors |
| | - | Marine water | 2.08 mg/l | Assessment Factors |
| | - | Sewage Treatment Plant | 100 mg/l | Assessment Factors |
| | - | Fresh water sediment | 77 mg/kg | Equilibrium Partitioning |
| | - | Marine water sediment | 7.7 mg/kg | Equilibrium Partitioning |
| | - | Soil | 100 mg/kg | Assessment Factors |

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. Use eye protection according to EN 166.

Skin protection

Hand protection :

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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 : 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 : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Characteristic.
- Odour threshold** : Not available.
- Melting point/freezing point** : May start to solidify at the following temperature: 0°C (32°F) This is based on data for the following ingredient: water. Weighted average: -90.15°C (-130.3°F)
- Initial boiling point and boiling range** : >37.78°C

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SECTION 9: Physical and chemical properties

| | |
|---|---|
| Flammability | : Not available. |
| Upper/lower flammability or explosive limits | : Greatest known range: Lower: 6% Upper: 44% (methanol) |
| Flash point | : Closed cup: 16.5°C |
| Auto-ignition temperature | : 270°C (518°F) |
| Decomposition temperature | : Stable under recommended storage and handling conditions (see Section 7). |
| pH | : Not applicable. insoluble in water. |
| Viscosity | : Kinematic (40°C): >21 mm ² /s |
| Solubility(ies) | : |

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

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

Vapour pressure :

| Ingredient name | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|-----------------|-------------------------|------|--------|-------------------------|-----|--------|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| Methanol | 126.96329 | 16.9 | | | | |

Evaporation rate : Highest known value: 2.1 (methanol) Weighted average: 0.83 compared 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.

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SECTION 10: Stability and reactivity

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

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|---------------------------------|---------|---------------|----------|
| 4-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 mists | Rat | 10 to 16 mg/l | 4 hours |
| | 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 | - |
| | LD50 Oral | Rat | 6.14 g/kg | - |

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

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|-----------------|-------------|
| 4-xylene | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitisation

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Teratogenicity

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

Specific target organ toxicity (single exposure)

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SECTION 11: Toxicological information

| 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 |
|---|------------|-------------------|----------------|
| ethylbenzene | Category 2 | - | hearing organs |
| crystalline silica, respirable powder (<10 microns) | 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.

Potential acute health effects

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

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

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SECTION 11: Toxicological information

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

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : 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 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

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

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

12.2 Persistence and degradability

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SECTION 12: Ecological information

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

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

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| xylene | - | - | Readily |
| ethylbenzene | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|-------------|-----------|
| 2-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 (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. 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)

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SECTION 13: Disposal considerations

| 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 : 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.

14. Transport information

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

Additional information

ADR/RID : None identified.

Tunnel code : (D/E)

ADN : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.

IMDG : None identified.

IATA : None identified.

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 Maritime transport in bulk according to IMO instruments : Not applicable.

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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**

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

| Category |
|----------|
| P5c |

National regulations

Social Security Code, Articles L 461-1 to L 461-7 : -methoxypropan-2-ol RG 84
xylene RG 4bis, RG 84 [1]
ethylbenzene RG 84
Quartz (SiO₂) RG 25
methanol RG 84
Surveillance médicale spéciale selon l'arrêté du 11 juillet 1977:
[1] Benzène et homologues
Pour les applications des peintures et vernis par pulvérisation

Reinforced medical surveillance : Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: not applicable

References : Reinforced medical surveillance ; Decree no. 2001-97 of 1 February 2001 establishing specific rules for the prevention of risks from carcinogens, mutagens and reprotoxics and amending the Labour code ; Decree no. 2003-1254 of 23 December 2003 relating to prevention of chemical risks and amending the Labour code ; Decree no. 2004-187 of 26 February 2004 on the placing on the market of biocidal products ; Decree no. 88-1231 of 29/12/1988 relating to poisonous preparations and substances. ; Decree no. 95-517 of 15 May 1997, relating to the classification of dangerous waste. ; Labour code article: R231-53 ; Labour code: Occupational air (ventilation, air purification): Art. R 232-5 to R 232-5-14 ; Labour code: Prevention of chemical risk: Art.R231-51 and R 231-54 to R 231-54-9 ; Labour code: Prevention of fires: Art.R232-12-13 to R 232-12-29 and R 233-30 ; Labour code: provisions applicable to women: Art. L 234-3 to L 236-6 ; Labour code: provisions applicable to young workers: Art. L 234-3 to L 236-6; Art: R234-16 ; Labour code: Sanitary installations: Art. R 232-2 à R 232-2-7 ; Law 76-663 of 19 July 1976 amending and implementing decree of 21 September 1977 relating to classified installations for the protection of the environment ; Tables of anticipated professional diseases according to article R461-3 of the labour code

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SECTION 15: Regulatory information

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

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

PBT = Persistent, Bioaccumulative and Toxic

vPvB = Very Persistent and Very Bioaccumulative

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

IMDG = International Maritime Dangerous Goods

IATA = International Air Transport Association

[Procedure used to derive the classification according to Regulation \(EC\) No. 1272/2008 \[CLP/GHS\]](#)

| Classification | Justification |
|---------------------|-----------------------|
| Flam. Liq. 2, H225 | On basis of test data |
| Skin Irrit. 2, H315 | Calculation method |
| Eye Irrit. 2, H319 | Calculation method |
| Repr. 1B, H360FD | Calculation method |
| STOT SE 3, H335 | Calculation method |
| STOT SE 3, H336 | Calculation method |
| STOT RE 2, H373 | Calculation method |

[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. |
| 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 \[CLP/GHS\]](#)

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SECTION 16: Other information

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

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revision

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