SAFETY DATA SHEET

Date of issue/Date of revision : 8 November 2024 Version : 1.03



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

1.1 Product identifier

Product name : SIGMATHERM 350 ALUMINIUM

Product code : 000001194772

Product type : Liquid.
Other means of : 00467236

identification

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

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

Supplier

+31 20 4075210

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

<u>Classification according to UK CLP/GHS</u>

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 3, H412

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 : Warning

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SECTION 2: Hazards identification

: Flammable liquid and vapour. **Hazard statements**

Causes skin irritation.

Causes serious eye irritation. May cause respiratory irritation.

Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot

> surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapour. Wash thoroughly after

handling.

: Not applicable. Response **Storage** : Not applicable.

: Dispose of contents and container in accordance with all local, regional, national **Disposal**

and international regulations.

P280, P210, P273, P261, P264, P501

Supplemental label

elements

: Not applicable.

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

: Not applicable.

Special packaging requirements

Containers to be fitted

with child-resistant fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture contains substances that are assessed to be a PBT or a vPvB, refer to

Section 3.2.

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 | % | Classification | Type |
|---|---|------------|---|---------|
| kýlene | REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 | ≥25 - ≤48 | 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 | [1] [2] |
| Solvent naphtha (petroleum), heavy arom. Nota(s) P | REACH #: 01-2119451097-39 EC: 265-198-5 CAS: 64742-94-5 Index: 649-424-00-3 | ≥5.0 - ≤10 | STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066 | [1] |
| ethylbenzene | REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 | ≥5.0 - <10 | Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) | [1] [2] |

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SECTION 3: Composition/information on ingredients

| • | | | | |
|------------------------------|---|--------------|---|----------------|
| | Index: 601-023-00-4 | | Asp. Tox. 1, H304 Aquatic Chronic 3, H412 | |
| butan-1-ol | REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6 | ≥0.10 - ≤2.2 | Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 | [1] [2] |
| toluene | REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3 | ≤0.30 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 | [1] [2] |
| octamethylcyclotetrasiloxane | REACH #: 01-2119529238-36 EC: 209-136-7 CAS: 556-67-2 Index: 014-018-00-1 | ≤0.062 | Repr. 2, H361f Aquatic Chronic 1, H410 (M=10) | [1] [3] [4] |
| | | | 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.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT
- [4] Substance meets the criteria for vPvB

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

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.

: If swallowed, seek medical advice immediately and show the container or label. Keep Ingestion

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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation. Inhalation : May cause respiratory irritation.

Skin contact : Causes skin irritation. Defatting to the skin.

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SECTION 4: First aid measures

Ingestion : No known significant effects or critical hazards.

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 dryness cracking

Ingestion: No specific data.

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

: 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. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products

: Decomposition products may include the following materials:

carbon oxides metal oxide/oxides Formaldehyde.

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.

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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). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. 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.

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.

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SECTION 7: Handling and storage

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

8.1 Control parameters

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).

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| kylene | EH40/2005 WELs (United Kingdom (UK), 1/2020) [xylene, o-,m-,p-or mixed isomers] Absorbed through skin. STEL 15 minutes: 441 mg/m³. TWA 8 hours: 50 ppm. TWA 8 hours: 220 mg/m³. STEL 15 minutes: 100 ppm. |
| ethylbenzene | EH40/2005 WELs (United Kingdom (UK), 1/2020) Absorbed through skin. STEL 15 minutes: 552 mg/m³. STEL 15 minutes: 125 ppm. TWA 8 hours: 100 ppm. TWA 8 hours: 441 mg/m³. |
| butan-1-ol | EH40/2005 WELs (United Kingdom (UK), 1/2020) Absorbed through skin. STEL 15 minutes: 154 mg/m³. STEL 15 minutes: 50 ppm. |
| toluene | EH40/2005 WELs (United Kingdom (UK), 1/2020) Absorbed through skin. STEL 15 minutes: 384 mg/m³. TWA 8 hours: 191 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 100 ppm. |

Biological exposure indices

| Product/ingredient name | Exposure indices |
|-------------------------|---|
| kylene | EH40/2005 BMGVs (United Kingdom (UK), 8/2018) [Xylene, o-, m-, p- or mixed isomers] |
| | BGV: 650 mmol/mol creatinine, methyl hippuric acid [in urine]. Sampling time: post shift. |

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

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SECTION 8: Exposure controls/personal protection

measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|------------------------------|-------|------------------------|------------------------|----------------------------|----------|
| x ylene | DNEL | Long term Oral | 5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 65.3 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 65.3 mg/m³ | 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/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 221 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 260 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 260 mg/m³ | General population | Systemic |
| | DNEL | Short term Inhalation | 442 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 442 mg/m³ | Workers | Systemic |
| Solvent naphtha (petroleum), | DNEL | Long term Oral | 0.03 mg/kg bw/day | General population | Systemic |
| heavy arom. Nota(s) P | | | oros mg/ng bil/aby | Control and population | -, |
| Troavy arom. Hota(o) | DNEL | Long term Dermal | 0.28 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 0.69 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 0.69 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 0.95 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 2.31 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 2.31 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Oral | 25.6 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 143.5 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 160.23 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | | | Systemic |
| | DNEL | | 226 mg/m ³ | General population Workers | • |
| othydb an zan o | | Short term Inhalation | 384 mg/m ³ | | Systemic |
| ethylbenzene | DMEL | Long term Inhalation | 442 mg/m ³ | Workers | Local |
| | DMEL | Short term Inhalation | 884 mg/m³ | Workers | Systemic |
| | DNEL | Long term Oral | 1.6 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 15 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 77 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 180 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 293 mg/m³ | Workers | Local |
| butan-1-ol | DNEL | Long term Oral | 1.5625 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 3.125 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 55.357 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 155 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 310 mg/m³ | Workers | Local |
| toluene | DNEL | Long term Oral | 8.13 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 56.5 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 56.5 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 192 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 192 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 226 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 226 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 226 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 384 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 384 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 384 mg/m³ | Workers | Systemic |
| octamethylcyclotetrasiloxane | DNEL | Long term Oral | 3.7 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 13 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 13 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 73 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 73 mg/m³ | Workers | Systemic |
| | DINCL | Long term initialation | 7.5 mg/m | VVOIRGIS | Оузіснію |

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SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|-------------------------|------------------------|-----------------|--------------------------|
| xylene | 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 | - |
| | Marine water sediment | 12.46 mg/kg dwt | - |
| | Soil | 2.31 mg/kg | - |
| ethylbenzene | 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 |
| | 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 | - |
| butan-1-ol | Fresh water | 0.082 mg/l | - |
| | Marine water | 0.0082 mg/l | - |
| | Fresh water sediment | 0.178 mg/kg | - |
| | Marine water sediment | 0.0178 mg/kg | - |
| | Soil | 0.015 mg/kg | - |
| | Sewage Treatment Plant | | - |
| toluene | Fresh water | 0.68 mg/l | Sensitivity Distribution |
| | Marine water | 0.68 mg/l | Sensitivity Distribution |
| | Sewage Treatment Plant | 13.61 mg/l | Sensitivity Distribution |
| | Fresh water sediment | 16.39 mg/kg dwt | Equilibrium Partitioning |
| | Marine water sediment | 16.39 mg/kg dwt | - |

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 **Skin protection**

Hand protection

: Chemical splash goggles.

: 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:

Not recommended: nitrile rubber

Recommended: butyl rubber, neoprene, polyvinyl alcohol (PVA), Viton®

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SECTION 8: Exposure controls/personal protection

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 antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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 : Grey.

Odour : Aromatic. [Slight]
Odour threshold : Not available.

Melting point/freezing point

Initial boiling point and

boiling range

: >37.78°C (>100°F)

Flammability (solid, gas) : liquid

Upper/lower flammability or

explosive limits

: Not available.

Flash point : Closed cup: 28°C (82.4°F)

Auto-ignition temperature :

| 3 11 11 1 11 11 1 | | | |
|--|------------|------------|------------|
| Ingredient name | °C | °F | Method |
| solvent naphtha (petroleum), heavy arom. | 220 to 250 | 428 to 482 | ASTM E 659 |

pH : Not applicable.

Not applicable. insoluble in water.

Viscosity : Dynamic (room temperature): Not available.

Kinematic (room temperature): Not available.

Kinematic (40°C): >21 mm²/s

Solubility(ies) :

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

Miscible with water : No.

Partition coefficient: n-octanol/: Not applicable.

water

Vapour pressure :

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SECTION 9: Physical and chemical properties

| | Vapour Pressure at 20°C | | | Vap | our pressur | e at 50°C |
|----------------------|-------------------------|-----|--------|-------|-------------|-----------|
| Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |
| e thylbenzene | 9.30076 | 1.2 | | | | |

Relative density

1.06

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.

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 Formaldehyde. metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---------------------------------------|---------------------------|---------|-------------------------|----------|
| x ylene | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| | LD50 Oral | Rat | 4.3 g/kg | - |
| Solvent naphtha | LC50 Inhalation Dusts and | Rat | >5.2 mg/l | 4 hours |
| (petroleum), heavy arom. Nota(s) P | mists | | - | |
| | LD50 Oral | Rat | >5 g/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 | - |
| butan-1-ol | LC50 Inhalation Vapour | Rat | 24000 mg/m ³ | 4 hours |
| | LD50 Dermal | Rabbit | 3400 mg/kg | - |
| | LD50 Oral | Rat | 790 mg/kg | - |
| toluene | LC50 Inhalation Vapour | Rat | 49 g/m³ | 4 hours |
| | LD50 Dermal | Rabbit | 8.39 g/kg | - |
| | LD50 Oral | Rat | 5580 mg/kg | - |
| octamethylcyclotetrasiloxane | LC50 Inhalation Vapour | Rat | 36 g/m³ | 4 hours |
| | LD50 Dermal | Rat | >2375 mg/kg | - |
| | LD50 Oral | Rat | >4800 mg/kg | - |

Conclusion/Summary
Acute toxicity estimates

: There are no data available on the mixture itself.

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SECTION 11: Toxicological information

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|------------------------------|------------------|-------------------|--------------------------------|-----------------------------------|--|
| SIGMATHERM 350 ALUMINIUM | 69979.4 | 4721.5 | N/A | 27.0 | N/A |
| xylene | 4300 | 1700 | N/A | 11 | N/A |
| ethylbenzene | 3500 | 17800 | N/A | 17.8 | N/A |
| butan-1-ol | 790 | 3400 | N/A | 24 | N/A |
| toluene | 5580 | 8390 | N/A | 49 | N/A |
| octamethylcyclotetrasiloxane | N/A | N/A | N/A | 36 | N/A |

Irritation/Corrosion

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

Conclusion/Summary : Not available.

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

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

Mutagenicity

Conclusion/Summary

: There are no data available on the mixture itself.

Carcinogenicity

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

Reproductive toxicity

Conclusion/Summary

Teratogenicity

: There are no data available on the mixture itself.

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

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|------------|-------------------|------------------------------|
| √xylene | Category 3 | - | Respiratory tract irritation |
| Solvent naphtha (petroleum), heavy arom. Nota(s) P | Category 3 | - | Narcotic effects |
| butan-1-ol | Category 3 | - | Respiratory tract |
| | | | irritation |
| | Category 3 | | Narcotic effects |
| toluene | Category 3 | - | Narcotic effects |

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

| Product/ingredient name | Result |
|--|--------------------------------|
| x ylene | ASPIRATION HAZARD - Category 1 |
| Solvent naphtha (petroleum), heavy arom. Nota(s) P | ASPIRATION HAZARD - Category 1 |
| ethylbenzene | ASPIRATION HAZARD - Category 1 |
| toluene | ASPIRATION HAZARD - Category 1 |

SIGMATHERM 350 ALUMINIUM

SECTION 11: Toxicological information

Information on likely routes : Not a

of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.Inhalation : May cause respiratory irritation.

Skin contact : Causes skin irritation. Defatting to the skin.Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation: Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

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

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : 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 : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

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SECTION 12: Ecological information

| Product/ingredient name | Result | Species | Exposure |
|--|---|--|---------------------|
| Solvent naphtha (petroleum), heavy arom. Nota(s) P | NOEL 0.48 mg/l Fresh water | Daphnia | 21 days |
| ethylbenzene | Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water | Daphnia Daphnia - <i>Ceriodaphnia dubia</i> | 48 hours |
| butan-1-ol octamethylcyclotetrasiloxane | Acute LC50 1376 mg/l Chronic NOEC 100 mg/l Fresh water | Fish Daphnia - Water flea - <i>Daphnia</i> | 96 hours 21 days |
| | | magna | |

Conclusion/Summary : Not available.

12.2 Persistence and degradability

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

Conclusion/Summary: Not available.

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

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|------------------------------|------------|-------------|-----------|
| x ylene | 3.12 | 7.4 to 18.5 | Low |
| Solvent naphtha (petroleum), | 2.8 to 6.5 | - | High |
| heavy arom. Nota(s) P | | | |
| ethylbenzene | 3.6 | 79.43 | Low |
| butan-1-ol | 1 | - | Low |
| toluene | 2.73 | 8.32 | Low |
| octamethylcyclotetrasiloxane | 6.488 | - | High |

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

| Product/ingredient name | PBT | Р | В | Т | vPvB | vP | vB |
|------------------------------|-------------|-----------|-----------|-----------|-------------|-----------|-----------|
| x ylene | No | N/A | No | No | No | N/A | No |
| Solvent naphtha (petroleum), | No | N/A | N/A | No | N/A | N/A | N/A |
| heavy arom. Nota(s) P | | | | | | | |
| ethylbenzene | No | N/A | No | Yes | No | N/A | No |
| butan-1-ol | No | N/A | N/A | No | N/A | N/A | N/A |
| toluene | No | N/A | No | Yes | No | N/A | No |
| octamethylcyclotetrasiloxane | SVHC | Specified | Specified | Specified | SVHC | Specified | Specified |
| | (Candidate) | | | | (Candidate) | | |

12.6 Other adverse effects : No known significant effects or critical hazards.

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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 nonrecyclable 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

Packaging

Methods of disposal

- The classification of the product may meet the criteria for a hazardous waste.
- : 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 | ADN | IMDG | IATA |
|--|----------------------|-----------------------|----------------------|----------------------|
| 14.1 UN 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 | III | III | III | III |
| 14.5 Environmental hazards Marine pollutant substances | No. Not applicable. | Yes. Not applicable. | No. Not applicable. | No. Not applicable. |

Additional information

: None identified. ADR/RID

Tunnel code : (D/E)

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

vessels.

IMDG : None identified. None identified. **IATA**

user

14.6 Special precautions for : 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.

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SECTION 14: Transport information

14.7 Transport in bulk : No

according to IMO instruments

: Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>UK (GB)/REACH</u>

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

| Intrinsic property | Ingredient name | | | Date of revision |
|--------------------|------------------------------|-----------|---|------------------|
| ₽BT | octamethylcyclotetrasiloxane | Candidate | - | 6/27/2018 |
| vPvB | octamethylcyclotetrasiloxane | Candidate | - | 6/27/2018 |

Explosive precursors

: This product is regulated by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

Ozone depleting substances

Not listed.

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

| Product/ingredient name | Entry Number (REACH) |
|------------------------------|----------------------|
| SIGMATHERM 350 ALUMINIUM | 3 |
| toluene | 48 |
| octamethylcyclotetrasiloxane | 70 |

Labelling : Not applicable.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category P5c

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: 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

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

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SECTION 16: Other information

| Classification | Justification |
|-------------------------|-----------------------|
| Flam. Liq. 3, H226 | On basis of test data |
| Skin Irrit. 2, H315 | Calculation method |
| Eye Irrit. 2, H319 | Calculation method |
| STOT SE 3, H335 | Calculation method |
| Aquatic Chronic 3, H412 | Calculation method |

Full text of abbreviated H statements

| ⊬ 225 | Highly flammable liquid and vapour. |
|--------------|--|
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H361d | Suspected of damaging the unborn child. |
| H361f | Suspected of damaging fertility. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

Full text of classifications

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

History

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revision

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Prepared by : EHS
Version : 1.03

Disclaimer

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