SAFETY DATA SHEET

Date of issue/Date of revision

: 18 December 2023 Version





: 1.01

SECTION 1: Identification of the substance/mixture and of the company/ undertaking **1.1 Product identifier Product name** : SIGMASHIELD 880 BASE RAL 5012 **Product code** : 000001175986 Other means of identification 00424408 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/ : Coating. mixture : Product is not intended, labelled or packaged for consumer use. Uses advised against 1.3 Details of the supplier of the safety data sheet **PPG** Cameroun BP 1028, Douala Cameroon Tel: 00237 33 37 83 47 Fax: 00237 33 37 88 98 e-mail address of person : PS.ACEMEA@ppg.com responsible for this SDS **1.4 Emergency telephone** : ORFILA (INRS) 0033 (0)1 45 42 59 59 / 00237 33 37 83 47 number

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. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Muta. 2, H341 STOT RE 2, H373 Aquatic Chronic 3, H412 The product is classified as bazardous according to Regulation (EC) 1272/2008 as an

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

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

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

2.2 Label elements

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|---|--|--|---------------------------|--|
| SIGMASHIELD 880 BASE RAL 5012 | | | | |
| SECTION 2: Hazards | identificatio | n | | |
| Hazard pictograms | | | | |
| Signal word | : Warning | | | |
| Hazard statements | Causes serious Suspected of c May cause dan | itation. allergic skin reaction. | exposure. | |
| Precautionary statements | | | | |
| Prevention | protective glove | until all safety precautions have been read and es, protective clothing and eye or face protectic parks, open flames and other ignition sources. | on. Keep away from heat, | |
| Response | : Get medical ad | lvice/attention if you feel unwell. | | |
| Storage | : Not applicable. | | | |
| Disposal | international re | tents and container in accordance with all local gulations. 210, P260, P314, P501 | l, regional, national and | |
| Hazardous ingredients | Epoxy Resin (7 Phenol, methyl 2,3-epoxypropy | xipropoxi)phenyl]propane ′00 <mw<=1100) styrenated /l neodecanoate a, respirable powder (<10 microns)</mw<=1100) | | |
| Supplemental label elements | | v constituents. May produce an allergic reaction rdous respirable droplets may be formed when | | |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : Not applicable. | | | |
| Special packaging requirem | nents | | | |
| 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 do | bes not contain any substances that are assess | sed to be a PBT or a vPvB | |
| Other hazards which do not result in classification | : Prolonged or re | epeated contact may dry skin and cause irritation | on. | |

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Туре |
|--|--|-----------------|--|---|---------|
| bis-[4-(2,3-epoxipropoxi) phenyl]propane | REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2 | ≥10 - ≤22 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 | Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5% | [1] |
| xylene | EC: 215-535-7 CAS: 1330-20-7 | ≥5.0 - ≤10 | 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] |
| Epoxy Resin (700 <mw <=1100)</mw | CAS: 25036-25-3 | ≥1.0 - ≤5.0 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 | - | [1] |
| Phenol, methylstyrenated | REACH #: 01-2119555274-38 EC: 270-966-8 CAS: 68512-30-1 | ≥1.0 - ≤5.0 | Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412 | - | [1] |
| 2-methylpropan-1-ol | REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1 | ≥1.0 - <3.0 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 | - | [1] [2] |
| 2,3-epoxypropyl neodecanoate | REACH #: 01-2119431597-33 EC: 247-979-2 CAS: 26761-45-5 | ≥0.10 - ≤2.1 | Skin Sens. 1, H317 Muta. 2, H341 Aquatic Chronic 2, H411 | - | [1] |
| 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] |
| 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine | REACH #: 01-0000017900-73 EC: 432-840-2 CAS: 220926-97-6 Index: 616-201-00-7 | ≥1.0 - ≤5.0 | Acute Tox. 4, H332 STOT RE 2, H373 (lungs) (inhalation) Aquatic Chronic 4, H413 | ATE [Inhalation (dusts and mists)] = 3.56 mg/l | [1] [2] |
| | | | 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. <u>Type</u>

| English | (GB) |
|---------|------|
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SECTION 3: Composition/information on ingredients

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

This mixture contains \geq 1% of titanium dioxide. The Annex VI classification of titanium dioxide does not apply to this mixture according to Note 10.

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

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. 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 | No known significant effects or critical hazards. |
| Skin contact | Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction. |
| Ingestion | No known significant effects or critical hazards. |
| Over-exposure signs/sympton | <u>ns</u> |
| Eye contact | : Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation | : No specific data. |
| Skin contact | : Adverse symptoms may include the following: irritation redness dryness cracking |
| Ingestion | : No specific data. |
| 4.3 Indication of any immediate | e medical attention and special treatment needed |
| Notes to physician | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Specific treatments | No specific treatment. |

| SECTION | 5: Eirofighting modeuroe | | |
|------------|--------------------------|--------------------------------|--------------------|
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SECTION 5: Firefighting measures

| 5.1 Extinguishing media | |
|--|--|
| Suitable extinguishing media | : Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Unsuitable extinguishing media | : Do not use water jet. |
| 5.2 Special hazards arising fr | om 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 nitrogen oxides sulfur oxides metal oxide/oxides |
| 5.3 Advice for firefighters | |
| Special precautions for fire-fighters | : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. |
| Special protective equipment for fire-fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |

SECTION 6: Accidental release measures

| 6.1 Personal precautions, pro | tective 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. |

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SECTION 6: Accidental release measures

| 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. 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. 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. |
| 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.

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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/ingredie | nt name | | Exposure limit values | |
|---|---|--|--|--|
| xy lene | | EU OEL (Europe, 1/2 Absorbed through s STEL: 442 mg/m ³ 19 STEL: 100 ppm 15 r TWA: 221 mg/m ³ 8 TWA: 50 ppm 8 hou | 5 minutes. ninutes. nours. | oure] |
| 2-methylpropan-1-ol | | ACGIH TLV (United TWA: 152 mg/m ³ 8 l TWA: 50 ppm 8 hou | States, 1/2023). nours. | |
| crystalline silica, respirable p | , , , , , , , , , , , , , , , , , , , | ACGIH TLV (United TWA: 0.025 mg/m ³ | States, 1/2023). [Silica, crystalli 3 hours. Form: Respirable | ine] |
| 12-hydroxyoctadecanoic acid with 1,3-benzenedimethanan hexamethylenediamine | | ACGIH TLV (United a TWA: 10 mg/m ³ For TWA: 3 mg/m ³ , (inha | | rticle |
| Recommended monitoring procedures | Standard EN 689 by inhalation to c strategy) Europe application and u biological agents requirements for agents) Referen | (Workplace atmosphe hemical agents for con ean Standard EN 14042 se of procedures for th European Standard I the performance of pro- | g standards, such as the followin eres - Guidance for the assessme oparison with limit values and me 2 (Workplace atmospheres - Guid e assessment of exposure to che EN 482 (Workplace atmospheres bocedures for the measurement of e documents for methods for the quired. | ent of exposure asurement de for the emical and - General chemical |
| .2 Exposure controls | | | | |
| Appropriate engineering controls | other engineering recommended or | g controls to keep work statutory limits. The e oncentrations below an | e process enclosures, local exhat er exposure to airborne contamir engineering controls also need to y lower explosive limits. Use exp | nants below any keep gas, |
| ndividual protection measu | <u>res</u> | | | |
| Hygiene measures | eating, smoking a Appropriate tech Contaminated wo contaminated clo | and using the lavatory niques should be used ork clothing should not | ghly after handling chemical prod and at the end of the working per to remove potentially contaminat be allowed out of the workplace. Ensure that eyewash stations and cation. | iod. ed clothing. Wash |
| Eye/face protection Skin protection | : Chemical splash | goggles. | | |
| Hand protection | worn at all times necessary. Cons during use that th noted that the tim glove manufactur protection time of frequently repeat | when handling chemic sidering the parameters he gloves are still retain he to breakthrough for rers. In the case of min f the gloves cannot be ed contact may occur, | complying with an approved stand al products if a risk assessment in a specified by the glove manufact ing their protective properties. It any glove material may be differe ktures, consisting of several subs accurately estimated. When prol a glove with a protection class of nutes according to EN 374) is rec | ndicates this is surer, check should be ent for different stances, the longed or 6 |
| | | English (GB) | Cameroon | 7/16 |

| English (GB) Cameroon 7/16 |
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| SIGMASHIELD 88 | 0 BASE RAL 5 | 5012 |
| | | 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 | : | butyl rubber |
| Body protection | on : | 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 pro | otection | 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 pro | tection : | |
| Environmental controls | exposure : | 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 physica | I and chemical properties |
|----------------------------------|---------------------------|
|----------------------------------|---------------------------|

| <u>Appearance</u> | | | | | | | |
|---|-----|---|---|---------------|-------------------------|--|--|
| Physical state | 1 | Liquid. | | | | | |
| Colour | 1 | Blue. | | | | | |
| Odour | : | Aromatic. [Slight] | | | | | |
| Odour threshold | : | Not available. | ot available. | | | | |
| Melting point/freezing point | : | | ay start to solidify at the following temperature: 8 to 12°C (46.4 to 53.6°F) This is ased on data for the following ingredient: bis-[4-(2,3-epoxipropoxi)phenyl]propane. | | | | |
| Initial boiling point and boiling range | : | >37.78°C | | | | | |
| Flammability | : | Not available. | | | | | |
| Upper/lower flammability or explosive limits | : | Greatest known range: Lower: | Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol) | | | | |
| Flash point | : | Closed cup: 37°C | Closed cup: 37°C | | | | |
| Auto-ignition temperature | : | Ingredient name | °C | °F | Method | | |
| | | ,3-epoxypropyl neodecanoate | 276 | 528.8 | | | |
| Decomposition temperature | : | Stable under recommended sto | brage and h | nandling cond | itions (see Section 7). | | |
| рН | 1 | Not applicable. insoluble in wate | er. | | | | |
| Viscosity | - 1 | Kinematic (room temperature): >400 mm²/s Kinematic (40°C): >21 mm²/s | | | | | |
| Viscosity | : | > 100 s (ISO 6mm) | | | | | |
| Solubility(ies) | : | | | | | | |
| Media | | Result | | | | | |
| cold water | | Not soluble | | | | | |

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SECTION 9: Physical and chemical properties

| Vapour pressure | : | | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|--------------------------|---|---|-------------------------|----------|-------------------|-------------------------|------------|--------------|
| | | Ingredient name | mm Hg | kPa | Method | mm Hg | kPa | Method |
| | | methylpropan-1-ol | <12.00102 | <1.6 | DIN EN 13016-2 | | | |
| Evaporation rate | : | Highest known value acetate | : 0.77 (xy | ene) V | Veighted avera | ge: 0.730 | compared | d with butyl |
| Relative density | : | 1.67 | | | | | | |
| Vapour density | : | Highest known value Weighted average: 9 | | | bis-[4-(2,3-epc) | xipropox | i)phenyl] | propane). |
| Explosive properties | | The product itself is vapour or dust with a | | | the formation | of an exp | olosible n | nixture of |
| Oxidising properties | : | Product does not pre | esent an o | xidizing | hazard. | | | |
| Particle characteristics | | | | | | | | |
| Median particle size | | Not applicable. | | | | | | |

9.2 Other information

No additional information.

| SECTION 10: Stabilit | 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 nitrogen oxides sulfur oxides metal oxide/oxides | | | | | |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|------------------------|---------|-------------|----------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | LD50 Dermal | Rabbit | 23000 mg/kg | - |
| | LD50 Oral | Rat | 15000 mg/kg | - |
| xylene | LD50 Dermal | Rabbit | 1.7 g/kg | - |
| | LD50 Oral | Rat | 4.3 g/kg | - |
| Epoxy Resin (700 <mw<=1100)< td=""><td>LD50 Dermal</td><td>Rat</td><td>>2000 mg/kg</td><td>-</td></mw<=1100)<> | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | >2000 mg/kg | - |
| Phenol, methylstyrenated | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | >2000 mg/kg | - |
| 2-methylpropan-1-ol | LC50 Inhalation Vapour | Rat | 24.6 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 2460 mg/kg | - |
| | English (GB) | Car | neroon | 9/16 |

Code : 000001175986 Date of issue/Date of revision : 18 December 2023 SIGMASHIELD 880 BASE RAL 5012 **SECTION 11: Toxicological information** LD50 Oral 2830 mg/kg Rat -LD50 Dermal 3800 mg/kg 2,3-epoxypropyl neodecanoate Rat LD50 Oral Rat 9.6 g/kg

| 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine | LC50 Inhalation Dusts and mists | Rat | 3.56 mg/l | 4 hours |
|---|---------------------------------|------------|----------------------------|---------|
| | LD50 Dermal LD50 Oral | Rat Rat | >2000 mg/kg >2000 mg/kg | - |

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

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---------------------------------------|------------------------------------|---------|-------|-----------------|-------------|
| s-[4-(2,3-epoxipropoxi)phenyl]propane | Eyes - Mild irritant | Rabbit | - | 24 hours | - |
| | Eyes - Redness of the conjunctivae | Rabbit | 0.4 | 24 hours | - |
| | Skin - Oedema | Rabbit | 0.5 | 4 hours | - |
| | Skin - Erythema/Eschar | Rabbit | 0.8 | 4 hours | - |
| | Skin - Mild irritant | Rabbit | - | 4 hours | - |
| xylene | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |

Conclusion/Summary

| : There are no data available on the mixture its |
|--|
|--|

| Eyes : There are no data available on the mixture it | self. |
|--|-------|
|--|-------|

| Respiratory : There are no data available on the mixture itsel | f. |
|---|----|
|---|----|

Sensitisation

Skin

| Product | /ingredient name | Route of exposure | Species | Result |
|---|--|---------------------|-----------|-------------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | | skin | Mouse | Sensitising |
| Conclusion/Summar | у | L | | |
| Skin : There are no data avail | | lable on the mixtur | e itself. | |
| Respiratory | spiratory : 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)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------------|--|-------------------|--|
| xylene 2-methylpropan-1-ol | Category 3 Category 3 Category 3 | | Respiratory tract irritation Respiratory tract irritation Narcotic effects |

Specific target organ toxicity (repeated exposure)

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| SIGMASHIE | LD 880 BASE RAL 5012 | | |
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SECTION 11: Toxicological information

| SECTION 11: Toxicological information | | | |
|---|--------------------------|--------------------------|---------------|
| Product/ingredient name | Category | Route of exposure | Target organs |
| Quartz (SiO2) 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine | Category 1 Category 2 | inhalation inhalation | - lungs |

Aspiration hazard

| Product/i | ngredient name | Result | | |
|--|--|--|--|--|
| xylene | | ASPIRATION HAZARD - Category 1 | | |
| Information on likely routes of exposure | : Not available. | | | |
| Potential acute health effect | <u>ts</u> | | | |
| Inhalation | : No known significant effects or criti | o known significant effects or critical hazards. | | |
| Ingestion | : No known significant effects or criti | ical hazards. | | |
| Skin contact | : Causes skin irritation. Defatting to | the skin. May cause an allergic skin reaction. | | |
| Eye contact | : Causes serious eye irritation. | | | |
| Symptoms related to the ph | ysical, chemical and toxicological c | haracteristics | | |
| Inhalation | : No specific data. | | | |
| Ingestion | : No specific data. | | | |
| Skin contact | : Adverse symptoms may include the irritation redness dryness cracking | e following: | | |
| Eye contact | : Adverse symptoms may include the pain or irritation watering redness | e following: | | |
| Delayed and immediate effe | ects as well as chronic effects from s | 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 effe | <u>ects</u> | | | |
| Not available. | | | | |
| Conclusion/Summary | : Not available. | | | |
| General | repeated contact can defat the skir | ugh prolonged or repeated exposure. Prolonged or and lead to irritation, cracking and/or dermatitis. reaction may occur when subsequently exposed to | | |
| Carcinogenicity | : No known significant effects or criti | ical hazards. | | |
| Mutagenicity | : Suspected of causing genetic defe | cts. | | |
| Reproductive toxicity | : No known significant effects or criti | lo known significant effects or critical hazards. | | |
| Other information | : Not available. | | | |

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SECTION 11: Toxicological information

Prolonged or repeated contact may dry skin and cause irritation. 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 |
|---|---|---|----------|
| s-[4-(2,3-epoxipropoxi)phenyl]propane | Acute LC50 1.8 mg/l Fresh | Daphnia - <i>daphnia</i> | 48 hours |
| | water | magna | |
| | Chronic NOEC 0.3 mg/l | Daphnia | 21 days |
| 2-methylpropan-1-ol | Acute EC50 1100 mg/l | Daphnia | 48 hours |
| 2,3-epoxypropyl neodecanoate | Acute EC50 3.5 mg/l | Algae | 96 hours |
| | Acute EC50 4.8 mg/l | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 9.6 mg/l | Fish - Oncorhynchus mykiss | 96 hours |
| 12-hydroxyoctadecanoic acid, reaction products with | Acute EC50 >100 mg/l | Algae - | 72 hours |
| 1,3-benzenedimethanamine and | | Pseudokirchneriella | |
| hexamethylenediamine | | subcapitata | |
| | | (microalgae) | |
| | Acute EC50 >100 mg/l | Daphnia - Daphnia magna (Water flea) | 48 hours |
| | Acute LC50 >100 mg/l | Fish - Oncorhynchus | 96 hours |
| | , i i i i i i i i i i i i i i i i i i i | mykiss (rainbow | |
| | | trout) | |
| | Chronic NOEC 100 mg/l | Algae - | 72 hours |
| | | Pseudokirchneriella | |
| | | subcapitata | |
| | Chronic NOEC ≥50 mg/l | Daphnia - <i>Daphnia</i> | 21 days |
| | | magna (Water flea) | |

Conclusion/Summary

: There are no data available on the mixture itself.

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | | Dose | | Inoculum |
|---|---|--------------------------|-------------|--------|----|------------------------------------|
| hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine | OECD 301D Ready Biodegradability - Closed Bottle Test | 9 % - Not readily - 29 c | lays | - | | - |
| Conclusion/Summary | : There are no data | a available on the mixtu | re itself. | | | |
| Product/ingredient name | | Aquatic half-life | Photo | olysis | Bi | odegradability |
| b ís-[4-(2,3-epoxipropoxi)pheny xylene 2,3-epoxypropyl neodecanoate | | | - - - | | Re | ot readily eadily ot readily |

12.3 Bioaccumulative potential

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SECTION 12: Ecological information

| Product/ingredient name | LogPow | BCF | Potential |
|---|--------|-------------|-----------|
| xylene | 3.12 | 7.4 to 18.5 | Low |
| Phenol, methylstyrenated | 3.627 | - | Low |
| 2-methylpropan-1-ol | 1 | - | Low |
| 2,3-epoxypropyl neodecanoate | 4.4 | - | High |
| 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine | >6 | - | High |

| 12.4 Mobility in soil | |
|---|------------------|
| Soil/water partition coefficient (Koc) | : Not available. |
| Mobility | : Not available. |

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Not available.

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 catalog | lue (EWC) | |
| Waste code | Waste designation | |
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances | |
| Packaging | · | |
| Methods of disposal | The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. | |
| Type of packaging | European waste catalogue (EWC) | |
| Container | 15 01 06 mixed packaging | |

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

| Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (E | EU) |
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SECTION 13: Disposal considerations

| Special precautions This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. |
|--|
|--|

SECTION 14: Transport information

| | ADR/RID | IMDG | ΙΑΤΑ |
|------------------------------------|-----------------|-----------------|-----------------|
| 14.1 UN number or ID number | UN1263 | UN1263 | UN1263 |
| 14.2 UN proper shipping name | PAINT | PAINT | PAINT |
| 14.3 Transport hazard class(es) | 3 | 3 | 3 |
| 14.4 Packing group | III | 111 | 111 |
| 14.5 Environmental hazards | No. | No. | No. |
| Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. |

Additional information

| ADR/RID | This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1. |
|-------------|--|
| Tunnel code | : (D/E) |
| IMDG | : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5. |
| ΙΑΤΑ | : None identified. |
| | |

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.

| 14.7 Transport in bulk | : Not applicable. |
|------------------------|-------------------|
| according to IMO | |
| instruments | |

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

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.

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| SECTION 15: Regula | atory information | | |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : Not applicable. | | |
| Other national and international | tional regulations. | | |
| Explosive precursors Ozone depleting substance Not listed. | : Not applicable. ces (1005/2009/EU) | | |
| 15.2 Chemical safety assessment | : No Chemical Safety As | ssessment has been carried out. | |
| SECTION 16: Other | information | | |
| Indicates information that | has changed from previous | sly issued version. | |
| Abbreviations and acronyms | 1272/2008] DNEL = Derived No E | Labelling and Packaging Regulation [Re Ffect Level P-specific Hazard statement Effect Concentration | gulation (EC) No. |
| Full text of abbreviated H statements | H304 May be fata H312 Harmful in o H315 Causes skir H317 May causes H318 Causes ser H319 Causes ser H319 Causes ser H32 Harmful if ir H335 May cause H336 May cause H341 Suspected o H372 Causes dar H373 May cause H411 Toxic to aqu H412 Harmful to a | an allergic skin reaction. ious eye damage. ious eye irritation. | repeated exposure. |
| Full text of classifications [CLP/GHS] | : Acute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Aquatic Chronic 4 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 3 Muta. 2 Skin Irrit. 2 Skin Sens. 1 STOT RE 1 | ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUA LONG-TERM (CHRONIC) AQUA LONG-TERM (CHRONIC) AQUA ASPIRATION HAZARD - Categor SERIOUS EYE DAMAGE/EYE IR SERIOUS EYE DAMAGE/EYE IR FLAMMABLE LIQUIDS - Categor GERM CELL MUTAGENICITY - (SKIN CORROSION/IRRITATION SKIN SENSITISATION - Categor SPECIFIC TARGET ORGAN TO EXPOSURE - Category 1 SPECIFIC TARGET ORGAN TO | TIC HAZARD - Category 3 TIC HAZARD - Category 4 y 1 RITATION - Category 1 RITATION - Category 2 y 3 Category 2 - Category 2 y 1 KICITY - REPEATED |

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| SECTION 16: Other information | | |

| <u>History</u> | |
|---------------------------------|--------------------|
| Date of issue/ Date of revision | : 18 December 2023 |
| Date of previous issue | : 11 October 2022 |
| Prepared by | : EHS |
| Version | : 1.01 |

Disclaimer

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