# Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

# **SAFETY DATA SHEET**

Date of issue/Date of revision

: 9 November 2022



: 1

Version

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

| 1.1 Product identifier           |   |
|----------------------------------|---|
| Product name                     | : SIGMASHIELD 1090 BASE 14C39 -88                                 |
| Product code                     | : 00381729  |
| Product description              | 1 · · · · · · · · · · · · · · · · · · ·                           |
| Product type                     | : Liquid.   |
| Other means of<br>identification | : Not available.  |
| 1.2 Relevant identified uses     | s of the substance or mixture and uses advised against            |
| Product use                      | : Professional applications, Used by spraying.                    |
| Use of the substance/<br>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 : Product.Stewardship.EMEA@ppg.com responsible for this SDS

#### 1.4 Emergency telephone number

- **Supplier** 
  - +31 20 4075210

## **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Product definition : Mixture Classification according to UK CLP/GHS

Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Muta. 2, H341 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                  |                                |                   |

| Hazard statements   | 1   | Causes skin irritation.   |
|---|-----|---|
|   |     | May cause an allergic skin reaction.  |
|   |     | Causes serious eye irritation.  |
|   |     | Suspected of causing genetic defects.   |
|   |     | Harmful to aquatic life with long lasting effects.  |
| Precautionary statements  |     |   |
| Prevention  | -   | Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment. Avoid breathing vapour. Wash thoroughly after handling. |
| Response  | :   | Not applicable.   |
| Storage   | :   | Not applicable.   |
| Disposal  | :   | Dispose of contents and container in accordance with all local, regional, national and international regulations.   |
|   |     | P202, P280, P273, P261, P264, P501  |
| Supplemental label elements   | :   | Contains epoxy constituents. May produce an allergic reaction.  |
| Annex XVII - Restrictions<br>on the manufacture,<br>placing on the market and<br>use of certain dangerous<br>substances, mixtures and<br>articles | :   | Not applicable.   |
| Special packaging requirem  | nen | <u>ts</u>   |
| Containers to be fitted<br>with child-resistant<br>fastenings   | :   | Not applicable.   |
| Tactile warning of danger   | :   | Not applicable.   |
| 2.3 Other hazards   |     |   |
| Product meets the criteria<br>for PBT or vPvB according<br>to Regulation (EC) No.<br>1907/2006, Annex XIII  | :   | This mixture does not contain any substances that are assessed to be a PBT or a vPvB.   |
| Other hazards which do not result in classification   | :   | None known.   |

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

Mixture

2

#### 3.2 Mixtures

| Product/ingredient name                     | Identifiers  | %           | Classification  | Туре |
|---|--|-------------|---|------|
| bis-[4-(2,3-epoxipropoxi)phenyl]<br>propane | REACH #:<br>01-2119456619-26<br>EC: 216-823-5<br>CAS: 1675-54-3<br>Index: 603-073-00-2 | ≥10 - ≤21   | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Aquatic Chronic 2,<br>H411 | [1]  |
| 2,3-epoxypropyl neodecanoate                | REACH #:<br>01-2119431597-33<br>EC: 247-979-2<br>CAS: 26761-45-5                       | ≥1.0 - ≤3.8 | Skin Sens. 1, H317<br>Muta. 2, H341<br>Aquatic Chronic 2,<br>H411                             | [1]  |
|   |  |             | See Section 16 for<br>the full text of the H<br>statements declared<br>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.

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

<u>Type</u>

[1] Substance classified with a health or environmental hazard

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                 | <ul> <li>Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is<br/>irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained<br/>personnel.</li> </ul>                                    |
| Skin contact               | : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water<br>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. May cause an allergic skin reaction.  |
| Ingestion                      | : No known significant effects or critical hazards.   |
| Over-exposure signs/sympto     | <u>)ms</u>  |
| Eye contact                    | : Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness                                  |
| Inhalation                     | : No specific data.   |
| Skin contact                   | : Adverse symptoms may include the following:<br>irritation<br>redness  |
| Ingestion                      | : No specific data.   |
| 4.3 Indication of any immedia  | te 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<br>Suitable extinguishing<br>media | : Use an extinguishing agent suitable for the surrounding fire. |
|--|---|
| Unsuitable extinguishing media                             | : None known.   |

#### 5.2 Special hazards arising from the substance or mixture

| English | (GR) |
|---------|------|
| LIIGUSU |      |

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## SECTION 5: Firefighting measures

| : In a fire or if heated, a pressure increase will occur and the container may burst.<br>This material is harmful to aquatic life with long lasting effects. Fire water<br>contaminated with this material must be contained and prevented from being<br>discharged to any waterway, sewer or drain. |
|--|
| : Decomposition products may include the following materials:<br>carbon oxides<br>metal oxide/oxides   |
|  |
| : 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.  |
| : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  |
|  |

## **SECTION 6: Accidental release measures**

| 6.1 Personal precautions, pro   | te | ctive equipment and emergency procedures  |
|---------------------------------|----|---|
| For non-emergency<br>personnel  | :  | No action shall be taken involving any personal risk or without suitable training.<br>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from<br>entering. Do not touch or walk through spilt material. Avoid breathing vapour or<br>mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is<br>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<br>and sewers. Inform the relevant authorities if the product has caused environmental<br>pollution (sewers, waterways, soil or air). Water polluting material. May be harmful<br>to the environment if released in large quantities.   |
| 6.3 Methods and material for    | со | ntainment and cleaning up   |
| Small spill                     | :  | Stop leak if without risk. Move containers from spill area. Dilute with water and mop<br>up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry<br>material and place in an appropriate waste disposal container. Dispose of via a<br>licensed waste disposal contractor.  |
| Large spill                     | :  | Stop leak if without risk. Move containers from spill area. 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.<br>See Section 8 for information on appropriate personal protective equipment.<br>See Section 13 for additional waste treatment information.   |

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## **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 ingest. Avoid breathing vapour or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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

Storage temperature: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. 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. 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**

No exposure limit value known.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

| Product/ingredient name                     | Туре                                | Exposure              | Value                   | Population                           | Effects  |  |
|---|-------------------------------------|-----------------------|-------------------------|--------------------------------------|----------|--|
| bis-[4-(2,3-epoxipropoxi)<br>phenyl]propane | DNEL                                | Long term Inhalation  | 12.25 mg/m <sup>3</sup> | Workers                              | Systemic |  |
|   | DNEL                                | Short term Inhalation | 12.25 mg/m <sup>3</sup> | Workers                              | Systemic |  |
|   | DNEL                                | Long term Dermal      | 8.33 mg/kg bw/day       | Workers                              | Systemic |  |
|   | DNEL                                | Short term Dermal     | 8.33 mg/kg bw/day       | Workers                              | Systemic |  |
|   | DNEL                                | Long term Dermal      | 3.571 mg/kg bw/day      | General<br>population<br>[Consumers] | Systemic |  |
|   | DNEL                                | Short term Dermal     | 3.571 mg/kg bw/day      | General                              | Systemic |  |
| English (GB)                                | glish (GB) United Kingdom (UK) 5/13 |                       |                         |                                      |          |  |

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

|                 | DNEL                         | Long term Oral   | 0.75 mg/kg bw/day  | population<br>[Consumers]<br>General                           | Systemic                                     |
|-----------------|------------------------------|--|--|--|--|
|                 | DNEL                         | Short term Oral  | 0.75 mg/kg bw/day  | population<br>[Consumers]<br>General<br>population             | Systemic                                     |
|                 | DNEL<br>DNEL                 | Long term Dermal<br>Long term Oral   | 89.3 µg/kg bw/day<br>0.5 mg/kg bw/day  | [Consumers]<br>General population<br>General population        | Systemic                                     |
| 2,3-epoxypropyl | DNEL<br>DNEL<br>DNEL<br>DNEL | Long term Dermal<br>Long term Inhalation<br>Long term Inhalation<br>Long term Dermal | 0.75 mg/kg bw/day<br>0.87 mg/m <sup>3</sup><br>4.93 mg/m <sup>3</sup><br>1.15 mg/kg bw/day | Workers<br>General population<br>Workers<br>General population | Systemic<br>Systemic<br>Systemic<br>Systemic |
| neodecanoate    | DNEL                         | Long term Inhalation<br>Long term Dermal   | 1.6 mg/m <sup>3</sup><br>1.9 mg/kg bw/day  | General population<br>Workers                                  | Systemic<br>Systemic                         |
|                 | DNEL<br>DNEL                 | Short term Inhalation<br>Long term Inhalation  | 2.7 mg/m <sup>3</sup><br>2.7 mg/m <sup>3</sup>   | Workers<br>Workers<br>Workers                                  | Systemic<br>Systemic<br>Systemic             |

#### **PNECs**

| Product/ingredient name                 | Compartment Detail                   | Value  | Method Detail  |
|---|--------------------------------------|--|--|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | Marine water<br>Fresh water sediment | 0.006 mg/l<br>0.001 mg/l<br>0.996 mg/kg dwt<br>0.1 mg/kg dwt<br>0.196 mg/kg dwt<br>10 mg/l<br>11 mg/kg | Assessment Factors<br>Assessment Factors<br>Equilibrium Partitioning<br>Equilibrium Partitioning<br>Equilibrium Partitioning<br>Assessment Factors<br>Assessment Factors |

#### **8.2 Exposure controls**

| Appropriate engineering controls | <ul> <li>If user operations generate dust, fumes, gas, vapour or mist, use process enclosures,<br/>local exhaust ventilation or other engineering controls to keep worker exposure to<br/>airborne contaminants below any recommended or statutory limits.</li> </ul>  |
|----------------------------------|--|
| Individual protection meas       | <u>ures</u>  |
| Hygiene measures                 | : Wash hands, forearms and face thoroughly after handling chemical products, before<br>eating, smoking and using the lavatory and at the end of the working period.<br>Appropriate techniques should be used to remove potentially contaminated clothing.<br>Contaminated work clothing should not be allowed out of the workplace. Wash<br>contaminated clothing before reusing. Ensure that eyewash stations and safety<br>showers are close to the workstation location.  |
| Eye/face protection              | : Chemical splash goggles.   |
| Skin protection                  |  |
| Hand protection                  | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. butyl rubber |

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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.  |
|---------------------------------|---|--|
| 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<br>they comply with the requirements of environmental protection legislation. In some<br>cases, fume scrubbers, filters or engineering modifications to the process equipment<br>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

| <u>Appearance</u>                               |                  |   |       |        |  |  |
|---|------------------|---|-------|--------|--|--|
| Physical state                                  | : Liquid.        |   |       |        |  |  |
| Colour  | : Not av         | ailable.  |       |        |  |  |
| Odour   | : Chara          | cteristic.  |       |        |  |  |
| Odour threshold                                 | : Not av         | ailable.  |       |        |  |  |
| Melting point/freezing point                    | based            | <ul> <li>May start to solidify at the following temperature: 8 to 12°C (46.4 to 53.6°F) This is<br/>based on data for the following ingredient: bis-[4-(2,3-epoxipropoxi)phenyl]propane.</li> <li>Weighted average: -2.78°C (27°F)</li> </ul> |       |        |  |  |
| Initial boiling point and<br>boiling range      | : >37.78         | : >37.78°C (>100°F)   |       |        |  |  |
| Flammability (solid, gas)                       | : liquid         |   |       |        |  |  |
| Upper/lower flammability or<br>explosive limits | : Not available. |   |       |        |  |  |
| Flash point                                     | : Closed         | l cup: Not applicable   | ə.    |        |  |  |
| Auto-ignition temperature                       | :                |   |       |        |  |  |
| Ingredient name                                 |                  | °C  | °F    | Method |  |  |
| 2,3-epoxypropyl neodecanoate                    |                  | 276   | 528.8 |        |  |  |

| Decomposition temperature             | :  |                                     |        |
|---------------------------------------|----|-------------------------------------|--------|
| рН                                    | :  | Not applicable.                     |        |
|                                       |    | Not applicable. insoluble in water. |        |
| Viscosity                             | 1  | Kinematic (40°C): >21 mm²/s         |        |
| Solubility(ies)                       | 1  |                                     | Method |
| Media                                 |    | Result                              |        |
| cold water                            |    | Not soluble                         |        |
| Miscible with water                   | :  | No.                                 |        |
| Partition coefficient: n-octano water | /: | Not applicable.                     |        |
| Vapour pressure                       | :  |                                     |        |

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## **SECTION 9: Physical and chemical properties**

|  | Va     | Vapour Pressure at 20°C |   |                   | apour pressure at 50°C          |
|--|--------|-------------------------|---|-------------------|---------------------------------|
| Ingredient name                                  | mm Hg  | kPa                     | Method                                    | mm Hg             | kPa                             |
| 2,3-epoxypropyl neodecanoate                     | 0.11   | 0.015                   |   |                   |                                 |
| Relative density                                 | : 1.74 | 1                       | <u>I</u>                                  |                   |                                 |
| Vapour density                                   | : Hig  | hest known              | value: 11.7 (Air =                        | = 1) (bis-[4-(2,3 | -epoxipropoxi)phenyl]propane    |
| Explosive properties                             |        | •                       | elf is not explosive with air is possible |                   | tion of an explosible mixture o |
| Dxidising properties<br>Particle characteristics | : Pro  | duct does n             | ot present an oxic                        | dizing hazard.    |                                 |
| 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 : Under normal conditions of storage and use, hazardous reactions will not occur. hazardous reactions **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** : Depending on conditions, decomposition products may include the following decomposition products materials: carbon oxides metal oxide/oxides

## **SECTION 11: Toxicological information**

#### **11.1 Information on toxicological effects**

#### Acute toxicity

| Result      | Species                                 | Dose   | Exposure  |
|-------------|---|--|---|
| LD50 Dermal | Rabbit                                  | 23000 mg/kg  | -   |
| LD50 Oral   | Rat                                     | 15000 mg/kg  | -   |
| LD50 Dermal | Rat                                     | 3800 mg/kg   | -   |
| LD50 Oral   | Rat                                     | 9.6 g/kg   | -   |
|             | LD50 Dermal<br>LD50 Oral<br>LD50 Dermal | LD50 Dermal Rabbit<br>LD50 Oral Rat<br>LD50 Dermal Rat | LD50 DermalRabbit23000 mg/kgLD50 OralRat15000 mg/kgLD50 DermalRat3800 mg/kg |

Conclusion/Summary Acute toxicity estimates

| Product/ingredient name                 | Oral (mg/<br>kg) | Dermal<br>(mg/kg) | Inhalation<br>(gases)<br>(ppm) | (vapours) | Inhalation<br>(dusts<br>and mists)<br>(mg/l) |
|---|------------------|-------------------|--------------------------------|-----------|--|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane | 15000            | 23000             | N/A                            |           | N/A  |
| 2,3-epoxypropyl neodecanoate            | 9600             | 3800              | N/A                            |           | N/A  |

Irritation/Corrosion

English (GB)

| Code    | : 00381729              |  |
|---------|-------------------------|--|
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## **SECTION 11: Toxicological information**

|   |                                      |                 |                              |           |          | <u>.                                    </u> |
|---|--------------------------------------|-----------------|------------------------------|-----------|----------|--|
| Product/ingredient name   | Resul                                | t               | Species                      | Score     | Exposure | Observation                                  |
| bis-[4-(2,3-epoxipropoxi)<br>phenyl]propane   | Eyes - Mild irritant                 | t               | Rabbit                       | -         | 24 hours | -  |
|   | Eyes - Redness o                     | f the           | Rabbit                       | 0.4       | 24 hours | -  |
|   | conjunctivae<br>Skin - Oedema        |                 | Rabbit                       | 0.5       | 4 hours  |  |
|   | Skin - Erythema/E                    | schar           | Rabbit                       | 0.5       | 4 hours  |  |
|   | Skin - Mild irritant                 |                 | Rabbit                       | -         | 4 hours  | -  |
| Conclusion/Summary  | : Not available.                     |                 | 1                            |           | 1        |  |
| Skin  | : There are no dat                   | a available on  | the mixture its              | elf.      |          |  |
| Eyes  | : There are no dat                   | a available on  | the mixture its              | elf.      |          |  |
| Respiratory   | : There are no dat                   | a available on  | the mixture its              | elf.      |          |  |
| <u>Sensitisation</u>  |                                      |                 |                              |           |          |  |
| Product/ingredient name   | Route of exposure                    | Sr              | pecies                       |           | Resu     | ult  |
| bis-[4-(2,3-epoxipropoxi)<br>phenyl]propane   | skin                                 | Mouse           |                              | Sens      | sitising |  |
| Conclusion/Summary  |                                      |                 |                              |           |          |  |
| Skin  | : There are no dat                   |                 |                              |           |          |  |
| Respiratory   | : There are no dat                   | a available on  | the mixture its              | eif.      |          |  |
| <u>Mutagenicity</u>   | <b>-</b> , , ,                       |                 |                              |           |          |  |
| Conclusion/Summary<br><u>Carcinogenicity</u>  | : There are no dat                   | a available on  | the mixture its              | elf.      |          |  |
| <b>Conclusion/Summary</b>   | : There are no dat                   | a available on  | the mixture its              | elf.      |          |  |
| Reproductive toxicity   |                                      |                 |                              |           |          |  |
| Conclusion/Summary  | : There are no dat                   | a available on  | the mixture its              | elf.      |          |  |
| <u>Teratogenicity</u>   |                                      |                 |                              |           |          |  |
| Conclusion/Summary  | onclusion/Summary :                  |                 |                              |           |          |  |
| There are no data available on the mixture itself. Specific target organ toxicity (single exposure) |                                      |                 |                              |           |          |  |
| Not available.  | (single exposure)                    | L               |                              |           |          |  |
|   |                                      |                 |                              |           |          |  |
| Specific target organ toxicity<br>Not available.  | <u>r (repeated exposu</u>            | <u>ire)</u>     |                              |           |          |  |
| Aspiration hazard   |                                      |                 |                              |           |          |  |
| Not available.  |                                      |                 |                              |           |          |  |
| Information on likely routes  | : Not available.                     |                 |                              |           |          |  |
| of exposure   |                                      |                 |                              |           |          |  |
| Potential acute health effects  |                                      |                 |                              |           |          |  |
| Eye contact   | : Causes serious                     | eye irritation. |                              |           |          |  |
| Inhalation  | : No known signifi                   | cant effects or | <sup>-</sup> critical hazard | s.        |          |  |
| Skin contact  | : Causes skin irrita                 | ation. May ca   | use an allergic              | skin read | ction.   |  |
| Ingestion   | : No known signifi                   | cant effects or | <sup>-</sup> critical hazard | S.        |          |  |
| Symptoms related to the phys  | ical, chemical and                   | l toxicologica  | Il characteristi             | <u>cs</u> |          |  |
| Eye contact   | : Adverse sympton pain or irritation | ms may includ   | le the following             | :         |          |  |
|   | watering<br>redness                  |                 |                              |           |          |  |
|   |                                      |                 |                              |           |          |  |

English (GB)

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|---|---|
| SECTION 11: Toxico                          | logical information   |
| Inhalation                                  | : No specific data.   |
| Skin contact                                | : Adverse symptoms may include the following:<br>irritation<br>redness                                |
| Ingestion                                   | : No specific data.   |
| Delayed and immediate effect                | ts as well as chronic effects from short and long-term exposure                                       |
| <u>Short term exposure</u>                  |   |
| Potential immediate<br>effects              | : Not available.  |
| Potential delayed effects                   | : Not available.  |
| Long term exposure                          |   |
| Potential immediate<br>effects              | : Not available.  |
| Potential delayed effects                   | : Not available.  |
| Potential chronic health eff                | ects  |
| Not available.                              |   |
| Conclusion/Summary                          | : Not available.  |
| General                                     | : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| Carcinogenicity                             | : No known significant effects or critical hazards.   |
| Mutagenicity                                | : Suspected of causing genetic defects.   |
| Reproductive toxicity                       | : No known significant effects or critical hazards.   |

Other information

: Not available.

## **SECTION 12: Ecological information**

12.1 Toxicity

| Product/ingredient name                     | Result                          | Species                    | Exposure |
|---|---------------------------------|----------------------------|----------|
| bis-[4-(2,3-epoxipropoxi)<br>phenyl]propane | Acute LC50 1.8 mg/l Fresh water | Daphnia - daphnia magna    | 48 hours |
|   | Chronic NOEC 0.3 mg/l           | Daphnia                    | 21 days  |
| 2,3-epoxypropyl<br>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 |
| Conclusion/Summary                          | : Not available.                |                            |          |

### 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

| Product/ingredient name  | Aquatic half-life | Photolysis | Biodegradability           |
|--|-------------------|------------|----------------------------|
| bis-[4-(2,3-epoxipropoxi)<br>phenyl]propane<br>2,3-epoxypropyl<br>neodecanoate | -                 |            | Not readily<br>Not readily |

### 12.3 Bioaccumulative potential

| Product/ingredient name         | LogPow | BCF | Potential |
|---------------------------------|--------|-----|-----------|
| 2,3-epoxypropyl<br>neodecanoate | 4.4    | -   | high      |

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|--------------|---------------------|-------|
|              |                     |       |

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### **SECTION 12: Ecological information**

#### 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 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.<br>Disposal of this product, solutions and any by-products should at all times comply<br>with the requirements of environmental protection and waste disposal legislation<br>and any regional local authority requirements. Dispose of surplus and non-<br>recyclable products via a licensed waste disposal contractor. Waste should not be<br>disposed of untreated to the sewer unless fully compliant with the requirements of<br>all authorities with jurisdiction. |
|---------------------|--|
| Hazardous waste     | : Yes.   |

## Hazardous waste

| waste catalogue     |  |
|---------------------|--|
| 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   | Waste catalogue  |

|                     | Type of packaging | Waste catalogue   |  |  |
|---------------------|-------------------|---|--|--|
|                     | Container         | 15 01 06 mixed packaging  |  |  |
| Special precautions |                   | : This material and its container must be disposed of in a saturation when handling emptied containers that have not be<br>Empty containers or liners may retain some product residuation spilt material and runoff and contact with soil, waterways, | en cleaned or rinsed out.<br>ues. Avoid dispersal of |  |

## **SECTION 14: Transport information**

|                                    | ADR/RID        | ADN  | IMDG           | IATA           |
|------------------------------------|----------------|--|----------------|----------------|
| 14.1 UN number                     | Not regulated. | 9006   | Not regulated. | Not regulated. |
| 14.2 UN proper<br>shipping name    | -              | ENVIRONMENTALLY<br>HAZARDOUS<br>SUBSTANCE,<br>LIQUID, N.O.S. | -              | -              |
| 14.3 Transport<br>hazard class(es) | -              | 9  | -              | -              |
| 14.4 Packing<br>group              | -              | -  | -              | -              |
| English (0                         | <br>GB)        | United Kingdom   | l<br>(UK)      | 11/13          |

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|--|---|--|-----------------|-----------------|
| SECTION 14:  | Transport inform  | nation   |                 |                 |
| 14.5<br>Environmental<br>hazards                       | No.   | Yes.   | No.             | No.             |
| Marine pollutant substances                            | Not applicable.   | Not applicable.  | Not applicable. | Not applicable. |
| Additional informa                                     | tion  | •  |                 | •               |
| ADR/RID :  | None identified.  |  |                 |                 |
| ADN :  | The product is only regulated as a dangerous good when transported in tank vessels. |  |                 |                 |
| IMDG :   | None identified.  |  |                 |                 |
| IATA :   | None identified.  | None identified.   |                 |                 |
| 14.6 Special precau<br>user                            | upright ar  | t within user's premises<br>ad secure. Ensure that person<br>of an accident or spillage. |                 |                 |
| 14.7 Transport in b<br>according to IMO<br>instruments | ulk : Not availa  | able.  |                 |                 |

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### UK (GB) /REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

#### Ozone depleting substances

Not listed.

Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Seveso Directive

This product is not controlled under the Seveso Directive.

## **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

| Abbreviations and | : ATE = Acute Toxicity Estimate   |
|-------------------|---|
| acronyms          | 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

| SIGMASHIELD 1090 BASE 14C39 -88 |  |  |  |
|---------------------------------|--|--|--|

### **SECTION 16: Other information**

| Classification          | Justification      |
|-------------------------|--------------------|
| Skin Irrit. 2, H315     | Calculation method |
| Eye Irrit. 2, H319      | Calculation method |
| Skin Sens. 1, H317      | Calculation method |
| Muta. 2, H341           | Calculation method |
| Aquatic Chronic 3, H412 | Calculation method |

Full text of abbreviated H statements

H315 Causes skin irritation.

- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H341 Suspected of causing genetic defects.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

#### Full text of classifications

| Aquatic Chronic 2<br>Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2<br>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |  |  |
|--|--|--|--|
| Eye Irrit. 2                           | ye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2   |  |  |
| Muta. 2                                | GERM CELL MUTAGENICITY - Category 2  |  |  |
| Skin Irrit. 2                          | SKIN CORROSION/IRRITATION - Category 2   |  |  |
| Skin Sens. 1                           | SKIN SENSITISATION - Category 1  |  |  |
| <u>History</u>                         |  |  |  |
| Date of issue/ Date of revision        | : 11/9/2022  |  |  |
| Date of previous issue                 | e : No previous validation   |  |  |

|             | •     |
|-------------|-------|
| Prepared by | : EHS |
| Version     | : 1   |

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