

SAFETY DATA SHEET



Date of issue/Date of revision

: 12 May 2026

Version

: 2.02

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

1.1 Product identifier

Product name : SIGMAGUARD CSF 650 BASE

Product code : 000001011126

Other means of identification

00247388; 00262234

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

**e-mail address of person
responsible for this SDS** : PS.ACEMEA@ppg.com

**1.4 Emergency telephone
number** : +20 2 6840902

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]

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Skin Sens. 1, H317

Repr. 1B, H360F

Aquatic Chronic 2, H411

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

Hazard pictograms :



: Danger

Hazard statements :

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

May damage fertility.

Toxic to aquatic life with long lasting effects.

Precautionary statements

Code : 000001011126 Date of issue/Date of revision : 12 May 2026
SIGMAGUARD CSF 650 BASE

SECTION 2: Hazards identification

- 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.
- Response** : Collect spillage. IF exposed or concerned: Get medical advice or attention.
- Storage** : Not applicable.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
P202, P280, P273, P391, P308 + P313, P501
- Hazardous ingredients** : bis-[4-(2,3-epoxipropoxy)phenyl]propane; 1,6-Hexanediol, reaction products with epichlorohydrin; benzyl alcohol and Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine
- Supplemental label elements** : Contains epoxy constituents. May produce an allergic reaction.
- Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Restricted to professional users.
- Special packaging requirements**
- Containers to be fitted with child-resistant fastenings** : Not applicable.
- Tactile warning of danger** : Not applicable.

2.3 Other hazards

- Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 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

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|--|---|------------|--|---|------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2 | ≥25 - ≤50 | 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] |
| 1,6-Hexanediol, reaction products with epichlorohydrin | REACH #: 01-2119463471-41 EC: 618-939-5 CAS: 933999-84-9 | ≥5.0 - ≤10 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Repr. 1B, H360F Aquatic Chronic 3, H412 | - | [1] |
| benzyl alcohol | REACH #: 01-2119492630-38 | ≥5.0 - ≤10 | Acute Tox. 4, H302 Eye Irrit. 2, H319 | ATE [Oral] = 1200 mg/kg | [1] |

Code : 000001011126 Date of issue/Date of revision : 12 May 2026
SIGMAGUARD CSF 650 BASE

SECTION 3: Composition/information on ingredients

| | | | | | |
|--|--|------|--|---|-----|
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5 REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0 | <1.0 | Skin Sens. 1B, H317 Skin Sens. 1B, H317 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above. | - | [1] |
|--|--|------|--|---|-----|

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.

[1] Substance classified with a health or environmental hazard

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : 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/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Code : 000001011126 Date of issue/Date of revision : 12 May 2026
SIGMAGUARD CSF 650 BASE

SECTION 4: First aid measures

- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic 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

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.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. 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".

Code : 000001011126

Date of issue/Date of revision

: 12 May 2026

SIGMAGUARD CSF 650 BASE

SECTION 6: Accidental release measures

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. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. 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. 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. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not 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

: Store between the following temperatures: 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.

Code : 000001011126 Date of issue/Date of revision : 12 May 2026
SIGMAGUARD CSF 650 BASE

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|--|--|
| Talc , not containing asbestiform fibres titanium dioxide | ACGIH TLV (United States, 1/2025) A4. TWA 8 hours: 2 mg/m ³ . Form: Respirable fraction. Law Number 4 of 1994, Environmental Law, Annex 8 - Maximum limits for air pollutants inside workplaces (Egypt, 8/2011) [titanium dioxide] TWA 8 hours: 10 mg/m ³ . |

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Exposure controls

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Gloves : butyl rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Code : 000001011126 Date of issue/Date of revision : 12 May 2026
SIGMAGUARD CSF 650 BASE

SECTION 8: Exposure controls/personal protection

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** :
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Various
- Odour** : Aromatic. [Slight]
- Odour threshold** : Not available.
- Melting point/freezing point** : Not determined.
- Initial boiling point and boiling range** : >37.78°C
- Flammability** : Not determined. There are no data available on the mixture itself.
- Upper/lower flammability or explosive limits** : Not available.
- Flash point** : Closed cup: 100°C
- Auto-ignition temperature** : 426°C (798.8°F)
- Decomposition temperature** : Stable under recommended storage and handling conditions (see Section 7).
- pH** : 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 |

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

Vapour pressure :

| Ingredient name | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|-----------------|-------------------------|--------|--------|-------------------------|-----|--------|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| benzyl alcohol | 0.05 | 0.0067 | | | | |

- Relative density** : 1.4
- Explosive properties** : The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.
- Oxidising properties** : Product does not present an oxidizing hazard.
- Particle characteristics**
- Median particle size** : Not applicable.

9.2 Other information

Code : 000001011126 Date of issue/Date of revision : 12 May 2026
SIGMAGUARD CSF 650 BASE

SECTION 9: Physical and chemical properties

- 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.

No additional information.

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly.

- Causes serious eye irritation.
- Causes skin irritation.
- May cause an allergic skin reaction.
- May damage fertility.

Acute toxicity

| Product/ingredient name | Result | Dose / Exposure |
|--|---|---------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Rabbit - Dermal - LD50 | 23000 mg/kg |
| | Rat - Oral - LD50 | 15000 mg/kg |
| 1,6-Hexanediol, reaction products with epichlorohydrin | Rat - Male, Female - Oral - LD50 | 2189 mg/kg |
| | Rat - Male, Female - Dermal - LD50 | >2000 mg/kg |
| benzyl alcohol | Rabbit - Dermal - LD50 | >2000 mg/kg |
| | Rat - Oral - LD50 | 1200 mg/kg |
| | Rat - Inhalation - LC50 Dusts and mists | >5 mg/l [4 hours] |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | Rat - Oral - LD50 | >2000 mg/kg |
| | Rat - Inhalation - LC50 Dusts and mists | 5.05 mg/l [4 hours] |

Acute toxicity estimates

| Route | ATE value |
|-------|----------------|
| Oral | 13137.58 mg/kg |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Code : 000001011126 Date of issue/Date of revision : 12 May 2026
SIGMAGUARD CSF 650 BASE

| Product/ingredient name | Result |
|--|--|
| bis-[4-(2,3-epoxipropoxy)phenyl] propane | Rabbit - Eyes - Redness of the conjunctivae Duration of treatment/exposure: 24 hours Irritation score: 0.4 |
| - | Rabbit - Eyes - Mild irritant Duration of treatment/exposure: 24 hours Fully reversible in 7 days or less |
| - | Rabbit - Skin - Erythema/Eschar Duration of treatment/exposure: 4 hours Irritation score: 0.8 |
| - | Rabbit - Skin - Oedema Duration of treatment/exposure: 4 hours Irritation score: 0.5 |
| - | Rabbit - Skin - Mild irritant Duration of treatment/exposure: 4 hours |

Conclusion/Summary

- Skin** : Causes skin irritation.
Eyes : Causes serious eye irritation.
Respiratory : Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

| Product/ingredient name | Test | Result |
|--|-------------------|-------------|
| bis-[4-(2,3-epoxipropoxy)phenyl] propane | Mouse - skin | Sensitising |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | Guinea pig - skin | Sensitising |

Conclusion/Summary

- Skin** : May cause an allergic skin reaction.
Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

May damage fertility.

Specific target organ toxicity (single exposure)

Specific target organ toxicity (repeated exposure)

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

- Information on likely routes of exposure** : Not available.

Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.
Skin contact : Causes skin irritation. May cause an allergic skin reaction.
Eye contact : Causes serious eye irritation.

| | |
|----------------------------|---|
| Code : 000001011126 | Date of issue/Date of revision : 12 May 2026 |
| SIGMAGUARD CSF 650 BASE | |

Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

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

Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Potential chronic health effects

- 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** : No known significant effects or critical hazards.
- Reproductive toxicity** : May damage fertility.
- Other information** : Not available.
- 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.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

Code : 000001011126

Date of issue/Date of revision

: 12 May 2026

SIGMAGUARD CSF 650 BASE

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Dose / Exposure |
|--|----------------------------|--|----------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Chronic - NOEC | Daphnia | 0.3 mg/l [21 days] |
| | Acute - LC50 - Fresh water | Daphnia - <i>daphnia magna</i> | 1.8 mg/l [48 hours] |
| 1,6-Hexanediol, reaction products with epichlorohydrin | Acute - LC50 - Fresh water | Fish | 30 mg/l [96 hours] |
| | Acute - EC50 - Fresh water | Daphnia | 47 mg/l [48 hours] |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | NOEC | Daphnia | 15 mg/l [21 days] |
| | Acute - LC50 | Fish - <i>Oncorhynchus mykiss</i> | >10 mg/l [96 hours] |
| | Acute - EC50 | Daphnia - <i>Daphnia magna</i> | >10 mg/l [48 hours] |
| | Acute - EC50 | Algae - <i>Pseudokirchneriella subcapitata</i> | >100 mg/l [72 hours] |

Conclusion/Summary : Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|--|---|-----------------------------|------|----------|
| 1,6-Hexanediol, reaction products with epichlorohydrin | OECD [Ready Biodegradability - Closed Bottle Test] | 47% [28 days] - Not readily | | |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | Ready Biodegradability - Closed Bottle Test | 22% [28 days] | | |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | - | - | Not readily |
| 1,6-Hexanediol, reaction products with epichlorohydrin | - | - | Not readily |
| benzyl alcohol | - | - | Readily |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | - | - | Inherent |

12.3 Bioaccumulative potential

Code : 000001011126 Date of issue/Date of revision : 12 May 2026
SIGMAGUARD CSF 650 BASE

SECTION 12: Ecological information

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|-----|-----------|
| 1,6-Hexanediol, reaction products with epichlorohydrin | 0.822 | - | Low |
| benzyl alcohol | 0.87 | - | Low |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | >5.86 | - | High |

12.4 Mobility in soil

Soil/water partition coefficient

| Product/ingredient name | logK _{oc} | K _{oc} |
|---|--------------------|-----------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 4 | 10465.7 |
| benzyl alcohol | 1.1 | 12.6442 |

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

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

Product

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

Hazardous waste : Yes.

European waste catalogue (EWC)

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

Packaging

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

| Type of packaging | European waste catalogue (EWC) |
|-------------------|--------------------------------|
| Container | 15 01 06 mixed packaging |

Code : 000001011126 Date of issue/Date of revision : 12 May 2026
SIGMAGUARD CSF 650 BASE

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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | IMDG | IATA |
|---------------------------------|--|---|---|
| 14.1 UN number or ID number | UN3082 | UN3082 | UN3082 |
| 14.2 UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PAINT) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| 14.3 Transport hazard class(es) | 9 | 9 | 9 |
| 14.4 Packing group | III | III | III |
| 14.5 Environmental hazards | Yes. | Yes. | Yes. |
| Marine pollutant substances | Not applicable. | (bis-[4-(2,3-epoxipropoxy)phenyl]propane) | Not applicable. |

Additional information

- ADR/RID** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- Tunnel code** : (-)
- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Code : 000001011126 Date of issue/Date of revision : 12 May 2026
SIGMAGUARD CSF 650 BASE

SECTION 15: Regulatory information

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Restricted to professional users.

Other national and international regulations.

Explosive precursors : Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

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

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Full text of abbreviated H statements : H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H360F May damage fertility.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS] : Acute Tox. 4 ACUTE TOXICITY - Category 4
Aquatic Chronic 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Repr. 1B REPRODUCTIVE TOXICITY - Category 1B
Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1 SKIN SENSITISATION - Category 1
Skin Sens. 1B SKIN SENSITISATION - Category 1B

History

Date of issue/ Date of revision : 12 May 2026

Date of previous issue : 11 March 2026

Prepared by : EHS

Version : 2.02

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.