

SAFETY DATA SHEET

Date of issue/Date of revision

: 16 December 2023

Version

: 13.05



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

1.1 Product identifier

Product name : SIGMAGUARD 603 BASE GREY 5163

Product code : 00267448

Other means of identification

Not available.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use : Professional applications, Used by spraying.

**Use of the substance/
mixture** : Coating.

Uses advised against : Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL
Tweemontstraat 104
B-2100 Deurne
Belgium
Telephone +32-33606311
Fax +32-33606435

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

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : Poison Information Centre; emergency telephone, public + 45 82 12 12 12 (health sector +45 35 31 55 55)

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

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.

Code : 00267448 Date of issue/Date of revision : 16 December 2023
SIGMAGUARD 603 BASE GREY 5163

SECTION 2: Hazards identification

2.2 Label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Avoid release to the environment.
Avoid breathing vapour. Wash thoroughly after handling.

Response : Collect spillage.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

P280, P273, P261, P264, P391, P501

Hazardous ingredients : Bis-[4-(2,3-epoxipropoxy)phenyl]propane
1,6-Hexanediol, reaction products with epichlorohydrin
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine

Supplemental label elements : Contains epoxy constituents. May produce an allergic reaction.
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB : 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.

| | | | |
|-------------------------------|------------|--------------------------------|--------------------|
| Code | : 00267448 | Date of issue/Date of revision | : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | | | |

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % by weight | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|--|---|-------------|--|--|------|
| 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 CAS: 933999-84-9 | ≥5.0 - ≤10 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412 | - | [1] |
| benzyl alcohol | REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5 | ≥5.0 - ≤10 | Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319 | ATE [Oral] = 1230 mg/kg ATE [Inhalation (dusts and mists)] = 1.5 mg/l | [1] |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0 | <1.0 | 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.

Type
[1] Substance classified with a health or environmental hazard
This mixture contains ≥ 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.

| | |
|-------------------------------|--|
| Code : 00267448 | Date of issue/Date of revision : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | |

SECTION 4: First aid measures

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/symptoms

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
Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use 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
halogenated compounds
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.

Code : 00267448

Date of issue/Date of revision

: 16 December 2023

SIGMAGUARD 603 BASE GREY 5163

SECTION 5: Firefighting measures

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. 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. 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. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. 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.

| | | | |
|-------------------------------|------------|--------------------------------|--------------------|
| Code | : 00267448 | Date of issue/Date of revision | : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | | | |

SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in 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. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)
See Section 1.2 for Identified uses.

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters
Occupational exposure limits
No exposure limit value known.

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

DNELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|---|------|-----------------------|--------------------|--------------------------------|----------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | DNEL | Long term Inhalation | 12.25 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 12.25 mg/m³ | 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 population [Consumers] | Systemic |
| | DNEL | Short term Dermal | 3.571 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Long term Oral | 0.75 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Short term Oral | 0.75 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Long term Dermal | 89.3 µg/kg bw/day | General population | Systemic |
| | DNEL | Long term Oral | 0.5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.75 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.87 mg/m³ | General population | Systemic |

| | | | |
|-------------------------------|------------|--------------------------------|--------------------|
| Code | : 00267448 | Date of issue/Date of revision | : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | | | |

SECTION 8: Exposure controls/personal protection

| | | | | | |
|--|------|-----------------------|------------------|--------------------|----------|
| 1,6-Hexanediol, reaction products with epichlorohydrin | DNEL | Long term Inhalation | 4.93 mg/m³ | Workers | Systemic |
| | DNEL | Short term Dermal | 13.6 ng/cm² | General population | Local |
| benzyl alcohol | DNEL | Long term Dermal | 13.6 ng/cm² | General population | Local |
| | DNEL | Short term Dermal | 22.6 ng/cm² | Workers | Local |
| | DNEL | Long term Dermal | 22.6 ng/cm² | Workers | Local |
| | DNEL | Long term Inhalation | 0.27 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 0.44 mg/m³ | Workers | Local |
| | DNEL | Short term Oral | 1.5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Oral | 1.5 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Dermal | 1.7 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 3 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 5.29 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 5.29 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 6 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 10.57 mg/m³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 10.57 mg/m³ | Workers | Systemic |
| | DNEL | Long term Oral | 4 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 4 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 5.4 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 8 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Oral | 20 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Dermal | 20 mg/kg bw/day | General population | Systemic |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | DNEL | Long term Inhalation | 22 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 27 mg/m³ | General population | Systemic |
| | DNEL | Short term Dermal | 40 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 110 mg/m³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.055 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 0.308 mg/m³ | Workers | Local |

PNECs

| Product/ingredient name | Type | Compartment Detail | Value | Method Detail |
|--|------|------------------------|-----------------|--------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl] propane | - | Fresh water | 0.006 mg/l | Assessment Factors |
| | - | Marine water | 0.001 mg/l | Assessment Factors |
| | - | Fresh water sediment | 0.996 mg/kg dwt | Equilibrium Partitioning |
| | - | Marine water sediment | 0.1 mg/kg dwt | Equilibrium Partitioning |
| | - | Soil | 0.196 mg/kg dwt | Equilibrium Partitioning |
| | - | Sewage Treatment Plant | 10 mg/l | Assessment Factors |
| | - | Secondary Poisoning | 11 mg/kg | Assessment Factors |

8.2 Exposure controls

| | |
|----------------------------------|--|
| Appropriate engineering controls | : Good general ventilation should be sufficient to control worker exposure to airborne contaminants. |
| 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. Use eye protection according to EN 166. |

Code : 00267448 Date of issue/Date of revision : 16 December 2023
SIGMAGUARD 603 BASE GREY 5163

SECTION 8: Exposure controls/personal protection

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.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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

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

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties


Appearance

Physical state : Liquid.

Colour : Grey.

Odour : Characteristic.

Odour threshold : Not available.

Melting point/freezing point :  May start to solidify at the following temperature: 8 to 12°C (46.4 to 53.6°F) This is based on data for the following ingredient: bis-[4-(2,3-epoxipropoxy)phenyl]propane. Weighted average: 1.44°C (34.6°F)

Initial boiling point and boiling range : >37.78°C

Flammability : Not available.

Upper/lower flammability or explosive limits : Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)

Flash point : Closed cup: 100°C

| | | | |
|-------------------------------|------------|--------------------------------|--------------------|
| Code | : 00267448 | Date of issue/Date of revision | : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | | | |

SECTION 9: Physical and chemical properties

Auto-ignition temperature

Decomposition temperature

pH

Viscosity

Viscosity

Solubility(ies)

: 300°C (572°F)

: Stable under recommended storage and handling conditions (see Section 7).

: Not applicable. insoluble in water.

: Kinematic (40°C): >21 mm²/s

: 60 - 100 s (ISO 6mm)

:

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

Partition coefficient: n-octanol/ water

Vapour pressure

: Not applicable.

:

| 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 | | | | |

Evaporation rate

Relative density

Vapour density

: 0.007 (benzyl alcohol) compared with butyl acetate

: 1.4

: Highest known value: 11.7 (Air = 1) (bis-[4-(2,3-epoxipropoxi)phenyl]propane).
Weighted average: 10.36 (Air = 1)

Explosive properties

Oxidising properties

: The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.

: Product does not present an oxidizing hazard.

Particle characteristics

Median particle size

:

: Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

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

Code : 00267448 Date of issue/Date of revision : 16 December 2023
SIGMAGUARD 603 BASE GREY 5163

SECTION 11: Toxicological information

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

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|---------------------------------|--------------------|-------------------------|----------|
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane | LD50 Dermal | Rabbit | 23000 mg/kg | - |
| | LD50 Oral | Rat | 15000 mg/kg | - |
| | LD50 Dermal | Rat - Male, Female | >2000 mg/kg | - |
| | LD50 Oral | Rat - Male, Female | 2189 mg/kg | - |
| 1,6-Hexanediol, reaction products with epichlorohydrin | LC50 Inhalation Dusts and mists | Rat | >4178 mg/m ³ | 4 hours |
| benzyl alcohol | LD50 Dermal | Rabbit | 2000 mg/kg | - |
| | LD50 Oral | Rat | 1.23 g/kg | - |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | LC50 Inhalation Dusts and mists | Rat | 5.05 mg/l | 4 hours |
| | LD50 Oral | Rat | >2000 mg/kg | - |

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

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|------------------------------------|---------|-------|----------|-------------|
| Bis-[4-(2,3-epoxipropoxy)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 | - |
| | | | | | |

Conclusion/Summary

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

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

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

Sensitisation

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

Conclusion/Summary

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

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

Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Teratogenicity

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

Aspiration hazard

| | |
|-------------------------------|--|
| Code : 00267448 | Date of issue/Date of revision : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | |

SECTION 11: Toxicological information

Not available.

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. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|---------------------|--|
| Inhalation | : No specific data. |
| Ingestion | : No specific data. |
| Skin contact | : Adverse symptoms may include the following: irritation redness |
| Eye contact | : Adverse symptoms may include the following: pain or irritation watering redness |

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

Short term exposure

| | |
|------------------------------------|------------------|
| Potential immediate effects | : Not available. |
| Potential delayed effects | : Not available. |

Long term exposure

| | |
|------------------------------------|------------------|
| Potential immediate effects | : Not available. |
| Potential delayed effects | : Not available. |

Potential chronic health effects

Not available.

| | |
|------------------------------|---|
| Conclusion/Summary | : Not available. |
| General | : 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 | : No known significant effects or critical hazards. |
| 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

Not available.

11.2.2 Other information

Not available.

Code : 00267448 Date of issue/Date of revision : 16 December 2023
SIGMAGUARD 603 BASE GREY 5163

SECTION 12: Ecological information

12.1 Toxicity

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

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

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|--|---|------------------------------|------|----------|
| 1,6-Hexanediol, reaction products with epichlorohydrin | OECD 301D Ready Biodegradability - Closed Bottle Test | 47 % - Not readily - 28 days | - | - |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | 301D Ready Biodegradability - Closed Bottle Test | 22 % - 28 days | - | - |

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

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| Dis-[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

| 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 (K_{oc}) : Not available.

| | | | |
|-------------------------------|------------|--------------------------------|--------------------|
| Code | : 00267448 | Date of issue/Date of revision | : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | | | |

SECTION 12: Ecological information

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

| | |
|---------------------------------------|---|
| <u>Product</u> | |
| 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. |
| <u>European waste catalogue (EWC)</u> | |
| Waste code | Waste designation |
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances |

| | |
|---------------------|--|
| <u>Packaging</u> | |
| Methods of disposal | : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. |
| Type of packaging | European waste catalogue (EWC) |
| Container | 15 01 06 mixed packaging |






Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

| | | | | |
|------------------------------|---|---|---|---|
| | ADR/RID | ADN | IMDG | IATA |
| 14.1 UN number or ID number | UN3082 | UN3082 | UN3082 | UN3082 |
| 14.2 UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |

| | | | |
|-------------------------------|------------|--------------------------------|--------------------|
| Code | : 00267448 | Date of issue/Date of revision | : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | | | |

14. Transport information

| | | | | |
|---------------------------------|---|---|---|---|
| |  (bis-[4-(2,3-epoxipropoxi)phenyl]propane) |  (bis-[4-(2,3-epoxipropoxi)phenyl]propane) |  (bis-[4-(2,3-epoxipropoxi)phenyl]propane) |  (bis-[4-(2,3-epoxipropoxi)phenyl]propane) |
| 14.3 Transport hazard class(es) | 9 | 9 | 9 | 9 |
| 14.4 Packing group | III | III | III | III |
| 14.5 Environmental hazards | Yes. | Yes. | Yes. | Yes. |
| Marine pollutant substances | Not applicable. | Not applicable. |  (bis-[4-(2,3-epoxipropoxi)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 | : (-) |
| ADN | : 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. |
| 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 Maritime 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. |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : Not applicable. |
| Explosive precursors | :  Not applicable. |
| Ozone depleting substances (1005/2009/EU) | |

| | | | |
|-------------------------------|------------|--------------------------------|--------------------|
| Code | : 00267448 | Date of issue/Date of revision | : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | | | |

SECTION 15: Regulatory information

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

| |
|----------|
| Category |
| E2 |

National regulations

Product registration number : PR-2360086

Danish fire class : III-1

MAL-code : 00-5

Protection based on MAL : According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/ protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

MAL-code: 00-5

Application: When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new* booths and cabins with non-atomizing guns. During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents. During non-atomising spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Protective clothing must be worn.

When spraying in existing* spray booths, if the operator is outside the spray zone.

- Air-supplied full mask and protective clothing must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, protective clothing and hood must be worn.

| | | | |
|-------------------------------|------------|--------------------------------|--------------------|
| Code | : 00267448 | Date of issue/Date of revision | : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | | | |

SECTION 15: Regulatory information

Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc, must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

*See Regulations.

| | |
|--------------------------------|--|
| Restrictions on use | : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work. |
| List of undesirable substances | : 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
PBT = Persistent, Bioaccumulative and Toxic
vPvB = Very Persistent and Very Bioaccumulative
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
IMDG = International Maritime Dangerous Goods
IATA = International Air Transport Association

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

| Classification | Justification |
|--|--|
| Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 | Calculation method Calculation method Calculation method Calculation method |

Full text of abbreviated H statements

| | | |
|--------------|---------|-------|
| English (GB) | Denmark | 16/17 |
|--------------|---------|-------|

| | | | |
|-------------------------------|------------|--------------------------------|--------------------|
| Code | : 00267448 | Date of issue/Date of revision | : 16 December 2023 |
| SIGMAGUARD 603 BASE GREY 5163 | | | |

SECTION 16: Other information

| | |
|--|---|
| H302 H315 H317 H319 H332 H411 H412 | Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects. |
|--|---|

Full text of classifications [CLP/GHS]

| | |
|--|--|
| Acute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Eye Irrit. 2 Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1B | ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1B |
|--|--|

History

| | |
|---------------------------------|--------------------|
| Date of issue/ Date of revision | : 16 December 2023 |
| Date of previous issue | : 31 October 2022 |
| Prepared by | : EHS |
| Version | : 13.05 |

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.