

SAFETY DATA SHEET



Date of issue/Date of revision 18 June 2023

Version 4.01

Section 1. Identification of the substance/mixture and of the company/undertaking

Product code : 00446947
Product name : STEELGUARD 951 BASE LIGHTGREY
Other means of identification : Not available.
Product type : Liquid.

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

Product use : Coating.
Professional applications, Used by spraying.
Uses advised against : Product is not intended, labelled or packaged for consumer use.

Supplier's details : PPG Coatings (Thailand) Co., Ltd.
15 Rama 9 Road, Kwaeng Huamark,
Khet Bangkapi, Bangkok 10240 Thailand
T: 662-319-4190 #224
F: 662-319-4189

Emergency telephone number (with hours of operation) : CHEMTREC 001-800-13-203-9987 (CCN 17704)

Section 2. Hazards identification

Classification of the substance or mixture : SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
AQUATIC HAZARD (ACUTE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 12.2%

GHS label elements

Hazard pictograms :



Section 2. Hazards identification

| | |
|--|---|
| 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 vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. |
| Response | : Collect spillage. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. |
| Storage | : Not applicable. |
| Disposal | : Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| Other hazards which do not result in classification | : Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F). |

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

CAS number : Not applicable.

| Ingredient name | % | CAS number |
|---|---------|-------------|
| Polyphosphoric acids, ammonium salts | 25- <50 | 68333-79-9 |
| bisphenol F diglycidyl ether, isomer mixture | 10- <20 | SUB140549 |
| hexamethylene diacrylate | 5- <10 | 13048-33-4 |
| Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol | 5- <10 | 9003-36-5 |
| tris(2-chloro-1-methylethyl) phosphate | 5- <10 | 13674-84-5 |
| Phenol, styrenated | 5- <10 | 61788-44-1 |
| Phenol, polymer with formaldehyde, glycidyl ether | 1- <3 | 28064-14-4 |
| Dodecanedioic acid, polymer with 2,2'-[1,4-butanediylbis(oxyethylene)] bis[oxirane], (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol], nonanedioic acid and 2,2'-oxybis[ethanol] | 1- <3 | 139651-91-5 |
| carbon | 1- <3 | 7440-44-0 |

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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 and hence require reporting in this section.

Section 3. Composition/information on ingredients

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

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary 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.
In case of accidental eye contact, avoid direct exposure to the sun or other sources of UV light as severe irritation including burns may result. These reactions can be delayed – get medical attention if pain, irritation or blistering occurs after contact.
- 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 recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, 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.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : 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 thermal decomposition products : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
phosphorus oxides
halogenated compounds
metal oxide/oxides
Formaldehyde.

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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.

Section 6. Accidental release measures

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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized 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".

Environmental precautions : Avoid dispersal of spilled 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.

Methods and materials 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.

Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Approach 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

- Precautions for safe handling** : 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 vapor 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.
- Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.
- 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|---|
| carbon | ACGIH TLV (United States). TWA: 10 mg/m ³ , (Inhalable) |

- Recommended monitoring procedures** : 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.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Section 8. Exposure controls/personal 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.

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 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.

Gloves : polyethylene 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.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Not available.

Odor : Characteristic.

Odor threshold : Not available.

pH : insoluble in water.

Melting point : May start to solidify at the following temperature: 7.8°C (46°F) This is based on data for the following ingredient: hexamethylene diacrylate. Weighted average: -5.45°C (22.2°F)

Section 9. Physical and chemical properties

| Boiling point | : >37.78°C (>100°F) | | | | |
|---|---|-------|--------|------------|-------------|
| Flash point | : Closed cup: Not applicable. | | | | |
| Evaporation rate | : Not available. | | | | |
| Flammability (solid, gas) | : liquid | | | | |
| Lower and upper explosive (flammable) limits | : Not available. | | | | |
| Vapor pressure | : Highest known value: 0.0006 kPa (0.005 mm Hg) (at 20°C) (Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol). Weighted average: 0.0003 kPa (0.002 mm Hg) (at 20°C) | | | | |
| Relative density | : 1.54 | | | | |
| Solubility(ies) | : <table border="1"> <thead> <tr> <th>Media</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td>cold water</td> <td>Not soluble</td> </tr> </tbody> </table> | Media | Result | cold water | Not soluble |
| Media | Result | | | | |
| cold water | Not soluble | | | | |
| Partition coefficient: n-octanol/water | : Not applicable. | | | | |
| Auto-ignition temperature | : Lowest known value: 235°C (455°F) (hexamethylene diacrylate). | | | | |
| Decomposition temperature | : Stable under recommended storage and handling conditions (see Section 7). | | | | |
| Viscosity | : Kinematic (40°C): >21 mm ² /s | | | | |

Section 10. Stability and reactivity

| | |
|---|---|
| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : When exposed to high temperatures may produce hazardous decomposition products. |
| Incompatible materials | : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids. |
| Hazardous decomposition products | : Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides phosphorus oxides halogenated compounds Formaldehyde. metal oxide/oxides |

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---------------------------------|--------------------|--------------|----------|
| Polyphosphoric acids, ammonium salts | LD50 Oral | Rat | 4.74 g/kg | - |
| bisphenol F diglycidyl ether, isomer mixture | LD50 Dermal | Rat - Male, Female | >2000 mg/kg | - |
| | LD50 Oral | Rat - Male, Female | >2000 mg/kg | - |
| hexamethylene diacrylate | LD50 Dermal | Rabbit | 3.65 g/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol tris(2-chloro-1-methylethyl) phosphate | LD50 Oral | Rat | >10000 mg/kg | - |
| | LC50 Inhalation Dusts and mists | Rat | >7 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >5 g/kg | - |
| | LD50 Oral | Rat | 1500 mg/kg | - |
| Phenol, styrenated | LD50 Dermal | Rabbit | >5010 mg/kg | - |
| | LD50 Oral | Rat | 3550 mg/kg | - |

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

Irritation/Corrosion

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.

Sensitization

| Product/ingredient name | Route of exposure | Species | Result |
|--------------------------|-------------------|------------|-------------|
| hexamethylene diacrylate | skin | Guinea pig | Sensitizing |
| Phenol, styrenated | skin | Mouse | Sensitizing |

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.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

| Name | Category | Route of exposure | Target organs |
|--------|------------|-------------------|------------------------------|
| carbon | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

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.

Symptoms related to the physical, chemical and toxicological characteristics

- 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.

Delayed and immediate effects and also 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

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Section 11. Toxicological information

| | |
|------------------------------|---|
| 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. |

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|--------|---------------|
| Oral | 5001.78 mg/kg |
| Dermal | 5712.51 mg/kg |

Other information

Acrylate components of the mixture have irritating properties. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. May cause allergic skin reactions with repeated exposure. The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract. Ingestion may cause nausea, weakness and central nervous system effects. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F). In case of accidental skin contact, avoid direct exposure to the sun or other sources of UV light as severe irritation including burns may result. These reactions can be delayed – get medical attention if pain, irritation, rash or blistering occurs after contact.

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|-----------------------------------|--|----------|
| Polyphosphoric acids, ammonium salts bisphenol F diglycidyl ether, isomer mixture | Acute EC50 730.5 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> - Neonate | 48 hours |
| | EC50 >1.8 mg/l | Algae | 72 hours |
| Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol | EC50 >1000 mg/l | Daphnia | 48 hours |
| | LC50 2.54 mg/l | Fish | 96 hours |
| Phenol, styrenated | NOEC 0.3 mg/l | Daphnia | 21 days |
| | Acute LC50 2.54 mg/l | Fish | 96 hours |
| Phenol, styrenated | Acute EC50 3.8 mg/l | Daphnia | 48 hours |

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

Persistence/degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|--|-----------|-----------------------------|------|----------|
| bisphenol F diglycidyl ether, isomer mixture | - | 0 % - Not readily - 28 days | - | - |
| Phenol, styrenated | OECD 301F | 7 % - Not readily - 28 days | - | - |

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

Section 12. Ecological information

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| bisphenol F diglycidyl ether, isomer mixture | - | - | Not readily |
| Phenol, styrenated | - | - | Not readily |

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|------|-----------|
| bisphenol F diglycidyl ether, isomer mixture | 3.6 | - | Low |
| hexamethylene diacrylate | 2.81 | - | Low |
| Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol | 2.7 | - | Low |
| tris(2-chloro-1-methylethyl) phosphate | 2.68 | 7.94 | Low |

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

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

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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

| | UN | IMDG | IATA |
|----------------------------|---|---|---|
| UN number | UN3082 | UN3082 | UN3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol F diglycidyl ether, isomer mixture, hexamethylene diacrylate) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol F diglycidyl ether, isomer mixture, hexamethylene diacrylate) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol F diglycidyl ether, isomer mixture, hexamethylene diacrylate) |
| Transport hazard class(es) | 9 | 9 | 9 |

Section 14. Transport information

| Packing group | III | III | III |
|-----------------------------|-----------------|--|-----------------|
| Environmental hazards | Yes. | Yes. | Yes. |
| Marine pollutant substances | Not applicable. | (bisphenol F diglycidyl ether, isomer mixture, hexamethylene diacrylate) | Not applicable. |

Additional information

- UN** : 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.

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.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

Harmful Chemicals List : Listed

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

History

Date of issue/Date of revision : 18 June 2023

Date of previous issue : 3/2/2023

Version : 4.01

Prepared by : EHS

Section 16. Other information

Key to abbreviations

: ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
UN = United Nations

✔ Indicates information that has changed from previously issued version.

Notice to reader

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 PPG, 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.