

Date of issue

19 November 2024

Version 1

**Section 1. Product and company identification**

**Product name** : SIGMASHIELD 1200 HRD CLEAR 000000CO1400  
**Product code** : 00475980CO  
**Other means of identification** : Not available.  
**Product type** : Liquid.

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

| <b>Identified uses</b><br>Coating. Paints. Painting-related materials. |        |
|------------------------------------------------------------------------|--------|
| Uses advised against                                                   | Reason |
| Not applicable.                                                        |        |

**Supplier's details:**

**Supplier** : PPG Industries Colombia Ltda  
Calle 51 # 40-13  
Municipio de Itagüí  
Antioquia, Colombia  
(57) (4) 3787400 (Porteria)

**Email address:** : HazComLatam@ppg.com

**Emergency telephone number** :  
Colombia: 01 8000 916012 (CISPROQUIM)  
+ 571 288 6012 (CISPROQUIM)  
Ecuador: 1800-59-3005 (CISPROQUIM)  
Peru: 080-050-847 (CISPROQUIM)

**Section 2. Hazards identification**

**Classification of the substance or mixture** : ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 3  
ACUTE TOXICITY (inhalation) - Category 3  
SKIN CORROSION - Category 1A  
SERIOUS EYE DAMAGE - Category 1  
SKIN SENSITIZATION - Category 1  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
AQUATIC HAZARD (LONG-TERM) - Category 2

## Section 2. Hazards identification

**Target organs** : Contains material which causes damage to the following organs: blood, liver, heart, brain.  
Contains material which may cause damage to the following organs: kidneys, the nervous system, upper respiratory tract, skin, eyes, adrenal, central nervous system (CNS).

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 5.4%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 12.9%

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Harmful if swallowed.  
Toxic in contact with skin or if inhaled.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
May cause damage to organs through prolonged or repeated exposure.  
Toxic to aquatic life with long lasting effects.

### Precautionary statements

**Prevention** : Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

**Response** : Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**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** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : Not applicable.

| Ingredient name                                  | %          | CAS number |
|--------------------------------------------------|------------|------------|
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | 60 - 100   | 6864-37-5  |
| benzyl alcohol                                   | 12.5 - <15 | 100-51-6   |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine     | 3 - <5     | 1760-24-3  |
| 2,4,6-tris(dimethylaminomethyl)phenol            | 2 - <3     | 90-72-2    |

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.

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** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

**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.

### 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.

**Specific treatments** : The exposed person may need to be kept under medical surveillance for 48 hours. No specific treatment.

**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.

### Potential acute health effects

**Eye contact** : Causes serious eye damage.

**Inhalation** : Toxic if inhaled.

**Skin contact** : Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.

**Ingestion** : Harmful if swallowed.

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  
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. Do not breathe 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.

**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

## Section 6. Accidental release measures

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 breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.

### Conditions for safe storage, including any incompatibilities

: Do not store above the following temperature: 50°C (122°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 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

None.

### 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

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### 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 Skin protection

: Chemical splash goggles and face shield.

## Section 8. Exposure controls/personal protection

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hand protection</b>        | : 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. |
| <b>Gloves</b>                 | : nitrile neoprene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Body protection</b>        | : 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.                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Other skin protection</b>  | : 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.                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Respiratory protection</b> | : 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

| <b>Appearance</b>                                   |                                                                                                            |       |        |            |             |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------|--------|------------|-------------|
| <b>Physical state</b>                               | : Liquid.                                                                                                  |       |        |            |             |
| <b>Color</b>                                        | : Not available.                                                                                           |       |        |            |             |
| <b>Odor</b>                                         | : Not available.                                                                                           |       |        |            |             |
| <b>pH</b>                                           | : Not applicable.                                                                                          |       |        |            |             |
| <b>Melting point</b>                                | : Not available.                                                                                           |       |        |            |             |
| <b>Boiling point</b>                                | : >37.78°C (>100°F)                                                                                        |       |        |            |             |
| <b>Flash point</b>                                  | : Closed cup: 106°C (222.8°F)                                                                              |       |        |            |             |
| <b>Evaporation rate</b>                             | : Not available.                                                                                           |       |        |            |             |
| <b>Flammability (solid, gas)</b>                    | : Not available.                                                                                           |       |        |            |             |
| <b>Lower and upper explosive (flammable) limits</b> | : Not available.                                                                                           |       |        |            |             |
| <b>Vapor pressure</b>                               | : Not available.                                                                                           |       |        |            |             |
| <b>Vapor density</b>                                | : Not available.                                                                                           |       |        |            |             |
| <b>Relative density</b>                             | : 0.97                                                                                                     |       |        |            |             |
| <b>Solubility(ies)</b>                              | <table> <tr> <th>Media</th><th>Result</th></tr> <tr> <td>cold water</td><td>Not soluble</td></tr> </table> | Media | Result | cold water | Not soluble |
| Media                                               | Result                                                                                                     |       |        |            |             |
| cold water                                          | Not soluble                                                                                                |       |        |            |             |
| <b>Partition coefficient: n-octanol/water</b>       | : Not applicable.                                                                                          |       |        |            |             |
| <b>Auto-ignition temperature</b>                    | : Not available.                                                                                           |       |        |            |             |
| <b>Decomposition temperature</b>                    | : Not available.                                                                                           |       |        |            |             |

## Section 9. Physical and chemical properties

- Viscosity** : Dynamic (room temperature): Not available.  
 Kinematic (room temperature): Not available.  
 Kinematic (40°C (104°F)): >21 mm<sup>2</sup>/s (>21 cSt)
- Viscosity** : > 100 s (ISO 6mm)

## 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 Formaldehyde. metal oxide/oxides

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                           | Result                          | Species | Dose                  | Exposure |
|---------------------------------------------------|---------------------------------|---------|-----------------------|----------|
| 2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine) | LC50 Inhalation Dusts and mists | Rat     | 420 mg/m <sup>3</sup> | 4 hours  |
|                                                   | LD50 Dermal                     | Rabbit  | >0.2 g/kg             | -        |
|                                                   | LD50 Oral                       | Rat     | >0.32 g/kg            | -        |
| benzyl alcohol                                    | LC50 Inhalation Dusts and mists | Rat     | >5 mg/l               | 4 hours  |
|                                                   | LD50 Dermal                     | Rabbit  | >2000 mg/kg           | -        |
|                                                   | LD50 Oral                       | Rat     | 1200 mg/kg            | -        |
| N-(3-(trimethoxysilyl)propyl) ethylenediamine     | LD50 Dermal                     | Rabbit  | >2000 mg/kg           | -        |
|                                                   | LD50 Oral                       | Rat     | 2413 mg/kg            | -        |
| 2,4,6-tris (dimethylaminomethyl) phenol           | LD50 Dermal                     | Rat     | 1280 mg/kg            | -        |
|                                                   | LD50 Oral                       | Rat     | 1200 mg/kg            | -        |

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

#### Irritation/Corrosion

Not available.

#### 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.

## Section 11. Toxicological information

### Sensitization

Not available.

### Conclusion/Summary

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

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

### Mutagenicity

Not available.

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

### Carcinogenicity

Not available.

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

### Reproductive toxicity

Not available.

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

### Teratogenicity

Not available.

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

### Specific target organ toxicity (single exposure)

| Name                                         | Category   | Route of exposure | Target organs                |
|----------------------------------------------|------------|-------------------|------------------------------|
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | Category 3 | -                 | Respiratory tract irritation |

### Specific target organ toxicity (repeated exposure)

| Name                                             | Category   | Route of exposure | Target organs |
|--------------------------------------------------|------------|-------------------|---------------|
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | Category 2 | -                 | -             |

**Target organs** : Contains material which causes damage to the following organs: blood, liver, heart, brain.  
Contains material which may cause damage to the following organs: kidneys, the nervous system, upper respiratory tract, skin, eyes, adrenal, central nervous system (CNS).

### Aspiration hazard

| Name           | Result                         |
|----------------|--------------------------------|
| benzyl alcohol | ASPIRATION HAZARD - Category 2 |

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

### Potential acute health effects

**Eye contact** : Causes serious eye damage.

## Section 11. Toxicological information

- Inhalation** : Toxic if inhaled.
- Skin contact** : Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Delayed and immediate effects and also chronic effects from short and long term exposure

- Conclusion/Summary** : There are no data available on the mixture itself. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

#### Short term exposure

- Potential immediate effects** : There are no data available on the mixture itself.
- Potential delayed effects** : There are no data available on the mixture itself.

#### Long term exposure

- Potential immediate effects** : There are no data available on the mixture itself.
- Potential delayed effects** : There are no data available on the mixture itself.

## Section 11. Toxicological information

### Potential chronic health effects

Not available.

- General** : May cause damage to organs through prolonged or repeated exposure. 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.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Product/ingredient name                          | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|--------------------------------------------------|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| SIGMASHIELD 1200 HRD CLEAR 000000CO1400          | 569.3        | 360.0          | N/A                      | N/A                        | 0.62                                |
| 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) | 500          | 300            | N/A                      | N/A                        | 0.5                                 |
| benzyl alcohol                                   | 1200         | 2500           | N/A                      | N/A                        | N/A                                 |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine     | 2413         | 2500           | N/A                      | N/A                        | N/A                                 |
| 2,4,6-tris(dimethylaminomethyl)phenol            | 1200         | 1280           | N/A                      | N/A                        | N/A                                 |

**Other information** : Not available.

## Section 12. Ecological information

### Ecotoxicity

| Product/ingredient name                      | Result               | Species | Exposure |
|----------------------------------------------|----------------------|---------|----------|
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | EC50 597 mg/l        | Fish    | 96 hours |
| 2,4,6-tris(dimethylaminomethyl)phenol        | Acute LC50 >100 mg/l | Daphnia | 48 hours |
|                                              | Acute LC50 >100 mg/l | Fish    | 96 hours |

### Persistence/degradability

| Product/ingredient name               | Test                                                  | Result                      | Dose | Inoculum |
|---------------------------------------|-------------------------------------------------------|-----------------------------|------|----------|
| 2,4,6-tris(dimethylaminomethyl)phenol | OECD 301D Ready Biodegradability - Closed Bottle Test | 4 % - Not readily - 28 days | -    | -        |

  

| Product/ingredient name               | Aquatic half-life | Photolysis | Biodegradability |
|---------------------------------------|-------------------|------------|------------------|
| benzyl alcohol                        | -                 | -          | Readily          |
| 2,4,6-tris(dimethylaminomethyl)phenol | -                 | -          | Not readily      |

|              |                                         |               |                  |         |   |
|--------------|-----------------------------------------|---------------|------------------|---------|---|
| Code         | 00475980CO                              | Date of issue | 19 November 2024 | Version | 1 |
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## Section 12. Ecological information

### Bioaccumulative potential

| Product/ingredient name                           | LogP <sub>ow</sub> | BCF | Potential |
|---------------------------------------------------|--------------------|-----|-----------|
| 2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine) | 1.8                | -   | Low       |
| benzyl alcohol                                    | 0.87               | -   | Low       |
| 2,4,6-tris (dimethylaminomethyl)phenol            | 0.219              | -   | Low       |

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : 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                                                                                                                                  | Brazil (ANTT)                                                                                                                       | IMDG                                                                                                                                | IATA                                                                                                                                |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| UN number                  | UN2922                                                                                                                              | UN2922                                                                                                                              | UN2922                                                                                                                              | UN2922                                                                                                                              |
| UN proper shipping name    | CORROSIVE LIQUID, TOXIC, N.O.S.<br><br>(2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine), 2,4,6-tris (dimethylaminomethyl) phenol) | LÍQUIDO CORROSIVO, TÓXICO, N.E.<br><br>(2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine), 2,4,6-tris (dimethylaminomethyl) phenol) | CORROSIVE LIQUID, TOXIC, N.O.S.<br><br>(2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine), 2,4,6-tris (dimethylaminomethyl) phenol) | Corrosive liquid, toxic, n.o.s.<br><br>(2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine), 2,4,6-tris (dimethylaminomethyl) phenol) |
| Transport hazard class(es) | 8 (6.1)                                                                                                                             | 8 (6.1)                                                                                                                             | 8 (6.1)                                                                                                                             | 8 (6.1)                                                                                                                             |
| Packing group              | II                                                                                                                                  | II                                                                                                                                  | II                                                                                                                                  | II                                                                                                                                  |
|                            |                                                                                                                                     |                                                                                                                                     |                                                                                                                                     |                                                                                                                                     |

|              |                                         |               |                  |         |   |
|--------------|-----------------------------------------|---------------|------------------|---------|---|
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## Section 14. Transport information

|                             |                                                                    |                                                                    |                                                     |                                                                    |
|-----------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------|
| Environmental hazards       | Yes. The environmentally hazardous substance mark is not required. | Yes. The environmentally hazardous substance mark is not required. | Yes.                                                | Yes. The environmentally hazardous substance mark is not required. |
| Marine pollutant substances | Not applicable.                                                    | Not applicable.                                                    | (2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine)) | Not applicable.                                                    |

### Additional information

- UN : None identified.
- Brazil : None identified.
- Risk number : 86
- IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

**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

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

## Section 16. Other information

### History

Date of previous issue : No previous validation

Version : 1

**Key to abbreviations** :

- EHS
- 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

|              |                                         |               |                  |         |   |
|--------------|-----------------------------------------|---------------|------------------|---------|---|
| Code         | 00475980CO                              | Date of issue | 19 November 2024 | Version | 1 |
| Product name | SIGMASHIELD 1200 HRD CLEAR 000000CO1400 |               |                  |         |   |

## Section 16. Other information

**References** : ABNT NBR 14725-4: 2014  
ANTT - National Land Transportation Agency

 Indicates information that has changed from previously issued version.

### 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 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.*