

# SAFETY DATA SHEET



Date of issue/Date of revision 28 July 2021

Version 4.02

## Section 1. Identification

**Product code** : 00393292  
**Product name** : PITT-CHAR XP BASE WHITE  
**Product type** : Liquid.

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

**Product use** : Coating.  
Professional applications, Used by spraying.

**Supplier's details** : PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803.  
Tel +65 68653737

**Emergency telephone number (with hours of operation)** : CHEMTREC +(65)-31581349 (CCN 17704)

## Section 2. Hazards identification

**Classification of the substance or mixture** : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
SKIN SENSITIZATION - Category 1  
TOXIC TO REPRODUCTION - Category 2  
AQUATIC HAZARD (LONG-TERM) - Category 2

### GHS label elements, including precautionary statements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : May cause an allergic skin reaction.  
Causes serious eye irritation.  
Suspected of damaging fertility or the unborn child.  
Toxic to aquatic life with long lasting effects.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment. Avoid breathing vapor.

## Section 2. Hazards identification

- Response** : Collect spillage. IF exposed or concerned: Get medical advice or attention. Take off contaminated clothing and wash it 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** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

### CAS number/other identifiers

- CAS number** : Not applicable.
- EC number** : Mixture.

| Ingredient name  | %        | CAS number   |
|--|----------|--------------|
| hexaboron dizinc undecaoxide   | 20 - <25 | 12767-90-7   |
| 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] | 20 - <25 | 139651-91-5  |
| Borate(5-), bis[μ-oxotetraoxodiborate(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-   | 10 - <20 | 12046-04-7   |
| phosphorous oxychloride, reaction products with propylene oxide  | 10 - <20 | 1244733-77-4 |
| bis-[4-(2,3-epoxypropoxy)phenyl]propane  | 5 - <10  | 1675-54-3    |
| N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)   | 0.3 - <1 | 123-26-2     |

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** : 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 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.

## Section 4. First aid measures

### 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** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

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

### 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.

## Section 5. Fire-fighting measures

- 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
- 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.
- 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 6. Accidental release measures

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in 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   |
|--|---|
| hexaboron dizinc undecaoxide   | <b>ACGIH TLV (United States, 1/2013).</b><br>TWA: 10 mg/m <sup>3</sup> , (Dusts and mists) Form: Inhalable fraction<br>TWA: 3 mg/m <sup>3</sup> , (Dusts and mists) Form: Respirable fraction |
| Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)- | <b>ACGIH TLV (United States).</b><br>TWA: 3 mg/m <sup>3</sup> Form: Respirable dust<br>TWA: 10 mg/m <sup>3</sup> Form: inhalable dust   |
| N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)                                   | <b>ACGIH TLV (United States).</b><br>TWA: 3 mg/m <sup>3</sup> Form: Respirable<br>TWA: 10 mg/m <sup>3</sup> Form: Total dust  |

## Section 8. Exposure controls/personal protection

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

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

**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/face protection** : Chemical splash goggles.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**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.

## Section 9. Physical and chemical properties

### Appearance

|                                  |   |
|----------------------------------|---|
| <b>Physical state</b>            | : Liquid.   |
| <b>Color</b>                     | : Off-white.  |
| <b>Odor</b>                      | : Characteristic.   |
| <b>pH</b>                        | : insoluble in water.   |
| <b>Boiling point</b>             | : >37.78°C (>100°F)   |
| <b>Flash point</b>               | : Closed cup: Not applicable.   |
| <b>Evaporation rate</b>          | : Not available.  |
| <b>Flammability (solid, gas)</b> | : liquid  |
| <b>Vapor pressure</b>            | : Highest known value: <1e-005 kPa (<8e-005 mm Hg) (at 20°C) (bis-[4-(2,3-epoxipropoxy)phenyl]propane). |
| <b>Vapor density</b>             | : Highest known value: 11.7 (Air = 1) (bis-[4-(2,3-epoxipropoxy)phenyl]propane).                        |
| <b>Relative density</b>          | : 1.47  |
| <b>Solubility</b>                | : Insoluble in the following materials: cold water.   |
| <b>Auto-ignition temperature</b> | : Not available.  |
| <b>Viscosity</b>                 | : <input checked="" type="checkbox"/> Kinematic (40°C (104°F)): >21 mm <sup>2</sup> /s (>21 cSt)        |

## Section 10. Stability and reactivity

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

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

## Section 11. Toxicological information

| Product/ingredient name  | Result                          | Species | Dose              | Exposure |
|--|---------------------------------|---------|-------------------|----------|
| hexaboron dizinc undecaoxide   | LC50 Inhalation Dusts and mists | Rat     | >5 mg/l           | 4 hours  |
| Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)- | LD50 Dermal                     | Rabbit  | >5000 mg/kg       | -        |
|  | LD50 Oral                       | Rat     | >5000 mg/kg       | -        |
|  | LD50 Dermal                     | Rabbit  | >2000 mg/kg       | -        |
| phosphorous oxychloride, reaction products with propylene oxide                        | LD50 Oral                       | Rat     | 4200 mg/kg        | -        |
|  | LC50 Inhalation Dusts and mists | Rat     | >7 mg/l           | 4 hours  |
|  | LD50 Dermal                     | Rabbit  | >2000 mg/kg       | -        |
| bis-[4-(2,3-epoxipropoxi) phenyl]propane   | LD50 Oral                       | Rat     | 630 to 2000 mg/kg | -        |
|  | LD50 Dermal                     | Rabbit  | 23000 mg/kg       | -        |
| N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide)                                  | LD50 Oral                       | Rat     | 15000 mg/kg       | -        |
|  | LC50 Inhalation Dusts and mists | Rat     | >5.11 mg/l        | 4 hours  |
|  | LD50 Dermal                     | Rat     | >2000 mg/kg       | -        |
|  | 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 |
|--|------------------------------------|---------|-------|----------|-------------|
| hexaboron dizinc undecaoxide             | Eyes - Cornea opacity              | Rabbit  | 33    | 24 hours | 74 hours    |
| bis-[4-(2,3-epoxipropoxi) phenyl]propane | Eyes - Redness of the conjunctivae | Rabbit  | 0.4   | 24 hours | -           |
|  | Eyes - Mild irritant               | Rabbit  | -     | 24 hours | -           |
|  | Skin - Erythema/Eschar             | Rabbit  | 0.8   | 4 hours  | -           |
|  | Skin - Edema                       | Rabbit  | 0.5   | 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.

### Sensitization

| Product/ingredient name                  | Route of exposure | Species | Result      |
|--|-------------------|---------|-------------|
| bis-[4-(2,3-epoxipropoxi) phenyl]propane | skin              | Mouse   | Sensitizing |

### Conclusion/Summary

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



## Section 11. Toxicological information

**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

| Product/ingredient name      | Maternal toxicity | Fertility | Development toxin | Species | Dose            | Exposure                 |
|------------------------------|-------------------|-----------|-------------------|---------|-----------------|--------------------------|
| hexaboron dizinc undecaoxide | Positive          | Positive  | Positive          | Rat     | Oral: 375 mg/kg | 90 days; 7 days per week |

**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)

Not available.

### 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** : 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** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

## Section 11. Toxicological information

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

### 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.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : Suspected of damaging fertility or the unborn child.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route | ATE value     |
|-------|---------------|
| Oral  | 2890.17 mg/kg |

#### **Other information** :

Sanding and grinding dusts may be harmful if inhaled.

## Section 12. Ecological information

### Toxicity

| Product/ingredient name   | Result                          | Species                                 | Exposure |
|---|---------------------------------|---|----------|
| hexaboron dizinc undecaoxide  | Acute EC50 76 mg/l              | Daphnia - Daphnia magna                 | 48 hours |
| Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-phosphorous oxychloride, reaction products with propylene oxide | Acute LC50 2.17 mg/l            | Fish - Salmo gairdneri                  | 96 hours |
|   | Acute LC50 >100 mg/l            | Fish                                    | 96 hours |
|   | EC50 82 mg/l                    | Algae                                   | 72 hours |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane   | EC50 131 mg/l                   | Daphnia                                 | 48 hours |
|   | LC50 56.2 mg/l                  | Fish                                    | 96 hours |
|   | NOEC 32 mg/l                    | Daphnia                                 | 48 hours |
|   | Acute LC50 1.8 mg/l Fresh water | Daphnia - daphnia magna                 | 48 hours |
| N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide)   | Chronic NOEC 0.3 mg/l           | Daphnia                                 | 21 days  |
|   | Acute EC50 29 to 43 mg/l        | Algae - Pseudokirchneriella subcapitata | 72 hours |
|   | Acute EC50 94 mg/l              | Daphnia - Daphnia magna                 | 48 hours |

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

### Persistence/degradability

| Product/ingredient name                               | Test | Result         | Dose | Inoculum |
|---|------|----------------|------|----------|
| N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide) | -    | 63 % - 28 days | -    | -        |

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

| Product/ingredient name                               | Aquatic half-life | Photolysis | Biodegradability |
|---|-------------------|------------|------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane               | -                 | -          | Not readily      |
| N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide) | -                 | -          | Readily          |

### Bioaccumulative potential

## Section 12. Ecological information

| Product/ingredient name   | LogP <sub>ow</sub> | BCF   | Potential |
|---|--------------------|-------|-----------|
| hexaboron dizinc undecaoxide                                    | -                  | 60960 | high      |
| phosphorous oxychloride, reaction products with propylene oxide | 2.68               | -     | low       |
| N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide)           | >6                 | -     | high      |

### 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  | IMDG  | IATA  |
|-----------------------------------|---|---|---|
| <b>UN number</b>                  | UN3082  | UN3082  | UN3082  |
| <b>UN proper shipping name</b>    | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(hexaboron dizinc undecaoxide, bis-[4-(2,3-epoxipropoxy)phenyl] propane) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(hexaboron dizinc undecaoxide, bis-[4-(2,3-epoxipropoxy)phenyl] propane) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(hexaboron dizinc undecaoxide, bis-[4-(2,3-epoxipropoxy)phenyl] propane) |
| <b>Transport hazard class(es)</b> | 9   | 9   | 9   |
| <b>Packing group</b>              | III   | III   | III   |
|                                   |   |   |   |

## Section 14. Transport information

|                             |                 |  |                 |
|-----------------------------|-----------------|--|-----------------|
| Environmental hazards       | Yes.            | Yes.   | Yes.            |
| Marine pollutant substances | Not applicable. | (hexaboron dizinc undecaoxide, bis-[4-(2,3-epoxipropoxy)phenyl] propane) | 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

### Singapore - hazardous chemicals under government control

| Ingredient name | Status |
|-----------------|--------|
| Phosphides      | Listed |

### 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** : 28 July 2021
- Date of previous issue** : 5/3/2021
- Version** : 4.02
- Prepared by** : EHS

## Section 16. Other information

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
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)  
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.