

SAFETY DATA SHEET



Date of issue/Date of revision 10 May 2024

Version 6

Section 1. Identification

Product name : PITT-CHAR NX BASE WHITE PF

Product code : 000001188971

Other means of identification : 00444773

Product type : Liquid.

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

Product use : Professional applications, Used by spraying.

Use of the substance/mixture : Coating.

Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
SETIQ Interior de la República: 800-00-214-00 (México)
SETIQ Ciudad de México: (55) 5559-1588 (México)

Technical Phone Number : 888-977-4762

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 2.6% (oral), 11.1% (dermal), 64.2% (inhalation)

GHS label elements

Hazard pictograms :



Signal word : Warning

Section 2. Hazards identification

| | |
|---|--|
| Hazard statements | : Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. |
| Precautionary statements | |
| Prevention | : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. |
| Response | : IF exposed or concerned: Get medical advice or attention. Take off contaminated clothing and wash it 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. Photosensitive agents : 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. 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. |
| Storage | : Store locked up. |
| Disposal | : Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| Supplemental label elements | : Sanding and grinding dusts may be harmful if inhaled. Emits toxic fumes when heated. |
| Hazards not otherwise classified | : None known. |

Section 3. Composition/information on ingredients

| | |
|--------------------------------------|------------------------------|
| Substance/mixture | : Mixture |
| Product name | : PITT-CHAR NX BASE WHITE PF |
| Other means of identification | : 00444773 |

| Ingredient name | % | CAS number |
|--|--------------|--------------|
| Hexaboron dizinc undecaoxide | ≥20 - ≤50 | 12767-90-7 |
| Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)- | ≥20 - ≤25 | 12046-04-7 |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | ≥10 - ≤20 | 1675-54-3 |
| phosphorous oxychloride, reaction products with propylene oxide | ≥5.0 - ≤10 | 1244733-77-4 |
| triphenyl phosphate | ≥5.0 - ≤10 | 115-86-6 |
| Synthetic fibers, alk. earth silicate | ≥1.0 - ≤5.0 | 436083-99-7 |
| Epoxy resin (MW ≤ 700) | ≥0.10 - ≤2.8 | 25068-38-6 |
| Cashew, nutshell liq. | ≤1.9 | 8007-24-7 |
| 2,2-bis(acryloyloxymethyl)butyl acrylate | ≥1.0 - ≤5.0 | 15625-89-5 |

Section 3. Composition/information on ingredients

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

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

Section 4. First aid measures

- 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** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- 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. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon 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).

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 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. 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.
- Special precautions** : Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Section 7. Handling and storage

- 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|---|--|
| Hexaboron dizinc undecaoxide | <p>ACGIH TLV (United States, 1/2013). TWA: 10 mg/m³, (Dusts and mists) Form: Inhalable fraction TWA: 3 mg/m³, (Dusts and mists) Form: Respirable fraction</p> <p>OSHA PEL (United States, 1/1989). TWA: 15 mg/m³, (Dusts and mists) Form: Inhalable fraction TWA: 5 mg/m³, (Dusts and mists) Form: Respirable fraction</p> |
| Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)- | <p>ACGIH TLV (United States). TWA: 3 mg/m³ Form: Respirable dust TWA: 10 mg/m³ Form: inhalable dust</p> |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane phosphorous oxychloride, reaction products with propylene oxide triphenyl phosphate | <p>None. None.</p> <p>ACGIH TLV (United States, 7/2023). TWA: 3 mg/m³ 8 hours.</p> <p>OSHA PEL (United States, 5/2018). TWA: 3 mg/m³ 8 hours.</p> |
| Synthetic fibers, alk. earth silicate | <p>ACGIH TLV (United States, 2011). TWA: 10 mg/m³, (Total dust) 8 hours.</p> |
| Epoxy resin (MW ≤ 700) | None. |
| Cashew, nutshell liq. | None. |
| 2,2-bis(acryloyloxymethyl)butyl acrylate | None. |

Key to abbreviations

| | | | |
|-------|--|------|------------------------------------|
| A | = Acceptable Maximum Peak | S | = Potential skin absorption |
| ACGIH | = American Conference of Governmental Industrial Hygienists. | SR | = Respiratory sensitization |
| C | = Ceiling Limit | SS | = Skin sensitization |
| F | = Fume | STEL | = Short term Exposure limit values |
| IPEL | = Internal Permissible Exposure Limit | TD | = Total dust |
| OSHA | = Occupational Safety and Health Administration. | TLV | = Threshold Limit Value |
| R | = Respirable | TWA | = Time Weighted Average |

Section 8. Exposure controls/personal protection

Z = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

Consult local authorities for acceptable exposure limits.

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 : 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 : 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. The respiratory protection shall be in accordance to 29 CFR 1910.134.

Section 9. Physical and chemical properties

Appearance

| | |
|--|-----------------------------|
| Physical state | : Liquid. |
| Color | : White. |
| Odor | : Aromatic. [Slight] |
| Odor threshold | : Not available. |
| pH | : Not applicable. |
| Melting point | : Not available. |
| Boiling point | : >37.78°C (>100°F) |
| Flash point | : Closed cup: 120°C (248°F) |
| Auto-ignition temperature | : Not available. |
| Decomposition temperature | : Not available. |
| Flammability | : Not available. |
| Lower and upper explosive (flammable) limits | : Not available. |
| Evaporation rate | : Not available. |
| Vapor pressure | : Not available. |
| Vapor density | : Not available. |
| Relative density | : 1.55 |
| Density (lbs / gal) | : 12.94 |

Solubility(ies)

| Media | Result |
|-------|--------|
|-------|--------|

| | |
|------------|-------------|
| Cold water | Not soluble |
|------------|-------------|

Partition coefficient: n-octanol/water

: Not applicable.

Viscosity

: Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

Volatility

: 0% (v/v), 0.074% (w/w)

% Solid. (w/w)

: 99.926

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. Refer to protective measures listed in sections 7 and 8.

Incompatible materials

: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

Section 10. Stability and reactivity

Hazardous decomposition products : Depending on conditions, decomposition products may include the following materials:
carbon oxides phosphorus oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|---------------------------------|---------|-------------------|----------|
| hexaboron dizinc undecaoxide | LC50 Inhalation Dusts and mists | Rat | >5 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)- | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | 4200 mg/kg | - |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | LD50 Dermal | Rabbit | 23000 mg/kg | - |
| | LD50 Oral | Rat | 15000 mg/kg | - |
| phosphorous oxychloride, reaction products with propylene oxide | LC50 Inhalation Dusts and mists | Rat | >7 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | 630 to 2000 mg/kg | - |
| triphenyl phosphate | LD50 Dermal | Rabbit | >7900 mg/kg | - |
| | LD50 Oral | Rat | 3500 mg/kg | - |
| Epoxy resin (MW ≤ 700) | LD50 Dermal | Rabbit | >2 g/kg | - |
| | LD50 Oral | Rat | >2 g/kg | - |
| 2,2-bis(acryloyloxymethyl)butyl acrylate | LD50 Dermal | Rabbit | 5170 mg/kg | - |
| | LD50 Oral | Rat | 5.19 g/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-epoxipropoxy)phenyl]propane | Eyes - Mild irritant | Rabbit | - | 24 hours | - |
| | Eyes - Redness of the conjunctivae | Rabbit | 0.4 | 24 hours | - |
| | Skin - Edema | Rabbit | 0.5 | 4 hours | - |
| | Skin - Erythema/Eschar | Rabbit | 0.8 | 4 hours | - |
| | Skin - Mild irritant | Rabbit | - | 4 hours | - |
| Epoxy resin (MW ≤ 700) | Eyes - Mild irritant | Rabbit | - | - | - |
| | Skin - Mild irritant | Rabbit | - | - | - |
| 2,2-bis(acryloyloxymethyl)butyl acrylate | Skin - Irritant | Rabbit | - | - | - |

Section 11. Toxicological information

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-epoxipropoxy)phenyl]propane | skin | Mouse | Sensitizing |
| Epoxy resin (MW ≤ 700) | skin | Mouse | Sensitizing |
| 2,2-bis(acryloyloxymethyl)butyl acrylate | skin | Rabbit | 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.

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|--|------|------|-----|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | - | 3 | - |
| 2,2-bis(acryloyloxymethyl)butyl acrylate | - | 2B | - |

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

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.

Section 11. Toxicological information

Target organs : Contains material which may cause damage to the following organs: blood, the nervous system, peripheral nervous system, central nervous system (CNS).

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

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

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
reduced 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

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. 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. If splashed in the eyes, the liquid may cause irritation and reversible damage. 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.

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.

Section 11. Toxicological information

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

Potential chronic health effects

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

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

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

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| PITT-CHAR NX BASE WHITE PF | 3162.4 | 6142.9 | N/A | N/A | N/A |
| Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-bis-[4-(2,3-epoxipropoxy)phenyl]propane | 4200 | 2500 | N/A | N/A | N/A |
| phosphorous oxychloride, reaction products with propylene oxide | 15000 | 23000 | N/A | N/A | N/A |
| triphenyl phosphate | 500 | 2500 | N/A | N/A | N/A |
| Epoxy resin (MW ≤ 700) | 3500 | N/A | N/A | N/A | N/A |
| Cashew, nutshell liq. | 2500 | 2500 | N/A | N/A | N/A |
| 2,2-bis(acryloyloxymethyl)butyl acrylate | 500 | 1100 | N/A | N/A | N/A |
| | 5190 | 5170 | N/A | N/A | N/A |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|----------------------------------|--|----------|
| Hexaboron dizinc undecaoxide | Acute EC50 76 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 2.17 mg/l | Fish - <i>Salmo gairdneri</i> | 96 hours |
| | Acute LC50 >100 mg/l | Fish | 96 hours |
| Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-bis-[4-(2,3-epoxipropoxy)phenyl]propane | Acute LC50 1.8 mg/l Fresh water | Daphnia - <i>daphnia magna</i> | 48 hours |
| | Chronic NOEC 0.3 mg/l | Daphnia | 21 days |
| phosphorous oxychloride, reaction products with propylene oxide | EC50 82 mg/l | Algae | 72 hours |
| | EC50 131 mg/l | Daphnia | 48 hours |
| triphenyl phosphate | LC50 51 mg/l | Fish | 96 hours |
| | NOEC 32 mg/l | Daphnia | 48 hours |
| | Acute LC50 0.09 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> - Neonate | 48 hours |
| | Chronic NOEC 0.1 mg/l | Algae - <i>Desmodesmus</i> | 3 days |

Section 12. Ecological information

| | | | |
|---|-----------------------|--------------------|----------|
| Epoxy resin (MW ≤ 700) | Acute LC50 1.8 mg/l | <i>subspicatus</i> | 48 hours |
| 2,2-bis(acryloyloxymethyl) butyl acrylate | Chronic NOEC 0.3 mg/l | Daphnia | 21 days |
| | Acute LC50 0.87 mg/l | Daphnia | 96 hours |
| | | Fish | |

Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|-------------------------|-----------|---------------|------|----------|
| Epoxy resin (MW ≤ 700) | OECD 301F | 5 % - 28 days | - | - |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| bis-[4-(2,3-epoxipropoxy) phenyl]propane | - | - | Not readily |
| Epoxy resin (MW ≤ 700) | - | - | Not readily |

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|---|--------------------|-----------|-----------|
| hexaboron dizinc undecaoxide | - | 60960 | High |
| phosphorous oxychloride, reaction products with propylene oxide | 2.68 | 0.8 to 14 | Low |
| triphenyl phosphate | 4.63 | 190.55 | Low |
| Epoxy resin (MW ≤ 700) | 3 | 31 | Low |
| Cashew, nutshell liq. | >4.78 | - | High |
| 2,2-bis(acryloyloxymethyl) butyl acrylate | 0.67 | - | Low |

Mobility in soil

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

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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 13. Disposal considerations

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

| | DOT | IMDG | IATA |
|-----------------------------|--|---|---|
| UN number | UN3082 | UN3082 | UN3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexaboron dizinc undecaoxide, triphenyl phosphate) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexaboron dizinc undecaoxide, bis-[4-(2,3-epoxipropoxy)phenyl] propane) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexaboron dizinc undecaoxide, bis-[4-(2,3-epoxipropoxy)phenyl] propane) |
| Transport hazard class (es) | 9 | 9 | 9 |
| Packing group | III | III | III |
| Environmental hazards | Yes. | Yes. | Yes. |
| Marine pollutant substances | (hexaboron dizinc undecaoxide) | (hexaboron dizinc undecaoxide) | Not applicable. |

Additional information

- DOT** : Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.
- 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

United States

United States inventory (TSCA 8b) : All components are active or exempted.

United States - TSCA 12(b) - Chemical export notification:

triphenyl phosphate

One time notification

United States - TSCA 5(a)2 - Proposed significant new use rules:

triphenyl phosphate

Listed

Section 15. Regulatory information

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION - Category 2

Composition/information on ingredients

| Name | % | Classification |
|--|--------------|---|
| hexaboron dizinc undecaoxide | ≥20 - ≤50 | EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION - Category 2 |
| Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-bis-[4-(2,3-epoxipropoxy)phenyl] propane | ≥20 - ≤25 | TOXIC TO REPRODUCTION - Category 2 |
| phosphorous oxychloride, reaction products with propylene oxide | ≥10 - ≤20 | SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B ACUTE TOXICITY (oral) - Category 4 |
| Epoxy resin (MW ≤ 700) | ≥5.0 - ≤10 | SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B ACUTE TOXICITY (oral) - Category 4 |
| Cashew, nutshell liq. | ≥0.10 - ≤2.8 | SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B |
| 2,2-bis(acryloyloxymethyl)butyl acrylate | ≤1.9 | SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B CARCINOGENICITY - Category 2 |
| | ≥1.0 - ≤5.0 | SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B CARCINOGENICITY - Category 2 |

SARA 313

| Supplier notification | Chemical name | CAS number | Concentration |
|-----------------------|------------------------------|------------|---------------|
| SARA 313 notification | hexaboron dizinc undecaoxide | 12767-90-7 | 10 - 30 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

 **WARNING:** Cancer - www.P65Warnings.ca.gov.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health : 3 * **Flammability** : 1 **Physical hazards** : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health : 3 **Flammability** : 1 **Instability** : 0

Date of previous issue : 12/20/2023

Organization that prepared the SDS : EHS

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)
N/A = Not available
SGG = Segregation Group
UN = United Nations

✔ 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.