

Date of issue

28 October 2025

Version 4.03

Section 1. Product and company 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

Identified uses	
Coating. Paints. Painting-related materials.	
Uses advised against	Reason
Not applicable.	

Supplier's details:

Supplier : PPG Industrial do Brasil – Tintas e Vernizes Ltda
Via Anhanguera KM 106, Bairro Sao Judas Tadeu
Sumare / SP, Brasil
55 19 2103-6000 (Recepção e Portaria)

Email address: : fds@ppg.com

Emergency telephone number : 0800 707 1767 / 0800 707 7022 – Empresa Ambipar response (24hs)
0800 014 8110 / (011)2661-8571 – CEATOX - Centro de Assistência Toxicológica
(atendimento 24hs)

Section 2. Hazards identification

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
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 2

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

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 11.9%

GHS label elements

Section 2. Hazards identification

Hazard pictograms : 

Signal word : Warning

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.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.

Response : Collect spillage. IF exposed or concerned: Get medical advice or attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. 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

Other means of identification : 00444773

Ingredient name	%	CAS number/other identifiers	Classification
hexaboron dizinc undecaoxide	≥20 - ≤30	12767-90-7	EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION - Category 2 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2
Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-	≥10 - ≤21	12046-04-7	ACUTE TOXICITY (oral) - Category 5 ACUTE TOXICITY (dermal) - Category 5 TOXIC TO REPRODUCTION - Category 2

Section 3. Composition/information on ingredients

bis-[4-(2,3-epoxipropoxy)phenyl] propane	≥10 - ≤20	1675-54-3	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2
tris(2-chloro-1-methylethyl) phosphate	≥5 - ≤9.6	13674-84-5	ACUTE TOXICITY (oral) - Category 4
Polyphosphoric acids, ammonium salts	≥5 - ≤8.8	68333-79-9	ACUTE TOXICITY (oral) - Category 5
triphenyl phosphate	≥5 - ≤7.5	115-86-6	ACUTE TOXICITY (oral) - Category 5 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
Synthetic fibers, alk. earth silicate	≥1 - ≤3	436083-99-7	Not classified as hazardous according to ABNT NBR 14725
Epoxy resin (MW ≤ 700)	≥0.3 - ≤2.4	25068-38-6	ACUTE TOXICITY (oral) - Category 5 ACUTE TOXICITY (dermal) - Category 5 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2
Cashew, nutshell liq.	≤1.6	8007-24-7	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B AQUATIC HAZARD (LONG-TERM) - Category 4
2,2-bis(acryloyloxymethyl)butyl acrylate	≥1 - ≤3	15625-89-5	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B CARCINOGENICITY - Category 2 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
Quaternary ammonium compounds, benzylbis	≤0.3	61789-73-9	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category

Section 3. Composition/information on ingredients

(hydrogenated tallow alkyl)methyl, chlorides			1 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
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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.
In case of accidental eye contact, avoid direct exposure to the sun or other sources of UV light as severe irritation including burns may result. These reactions can be delayed – get medical attention if pain, irritation or blistering occurs after contact.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

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.

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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

<u>Extinguishing media</u>	
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 very toxic to aquatic life. 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 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

<u>Personal precautions, protective equipment and emergency procedures</u>	
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.
<u>Methods and materials for containment and cleaning up</u>	
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. 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	ACGIH TLV (United States, 1/2013) TWA: 3 mg/m³ (Dusts and mists). Form: Respirable fraction. TWA: 10 mg/m³ (Dusts and mists). Form: Inhalable fraction.
Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-	ACGIH TLV (United States) TWA: 10 mg/m³. Form: inhalable dust. TWA: 3 mg/m³. Form: Respirable dust.
triphenyl phosphate	ACGIH TLV (United States, 1/2024) TWA 8 hours: 3 mg/m³.
Synthetic fibers, alk. earth silicate	ACGIH TLV (United States, 2011) TWA 8 hours: 10 mg/m³ (Total dust). TWA 8 hours: 3 mg/m³ (Respirable fraction).

Section 8. Exposure controls/personal protection

- 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 protection** : Chemical splash goggles.
- Skin 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.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Gloves** : polyethylene butyl rubber
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : White.
- Odor** : Aromatic. [Slight]
- pH** : Not applicable.
- Melting point** : Not available.
- Boiling point** : >37.78°C (>100°F)
- Flash point** : Closed cup: 120°C (248°F)
- Evaporation rate** : Not available.

Section 9. Physical and chemical properties

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 1.55

Solubility(ies)		Media	Result
		cold water	Not soluble

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)

Viscosity : > 100 s (ISO 6mm)

Particle characteristics

Median particle size : Not applicable.

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 phosphorus oxides halogenated compounds metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

This section contains information about toxicological effects and routes of exposure for the substances or mixtures that have these data or information available. There might be substances listed in section 3 of this SDS that will not have the information available.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

Suspected of damaging the unborn child.

Suspected of causing cancer.

Section 11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Dose
hexaboron dizinc undecaoxide	Rabbit - Dermal - LD50 Rat - Oral - LD50 Rat - Inhalation - LC50 Dusts and mists	>5000 mg/kg >5000 mg/kg >5 mg/l [4 hours]
Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-	Rabbit - Dermal - LD50	>2000 mg/kg
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Oral - LD50	4200 mg/kg 23000 mg/kg 15000 mg/kg
tris(2-chloro-1-methylethyl) phosphate	Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Inhalation - LC50 Dusts and mists	1500 mg/kg >5 g/kg >7 mg/l [4 hours]
Polyphosphoric acids, ammonium salts triphenyl phosphate	Rat - Oral - LD50 Rabbit - Dermal - LD50 Rat - Oral - LD50	4.74 g/kg >7900 mg/kg 3500 mg/kg
Epoxy resin (MW ≤ 700)	Rat - Oral - LD50 Rabbit - Dermal - LD50	>2 g/kg >2 g/kg
2,2-bis(acryloyloxymethyl)butyl acrylate	Rabbit - Dermal - LD50 Rat - Oral - LD50	5170 mg/kg 5.19 g/kg

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/ingredient name	Species	Dose	Score
hexaboron dizinc undecaoxide	Rabbit - Eyes - Cornea opacity	Amount/concentration applied: 0.083g Duration of treatment/exposure: 24 hours Observation period: 74 hours Fully reversible in more than 7 days	Irritation score: 33
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Rabbit - Eyes - Redness of the conjunctivae Rabbit - Eyes - Mild irritant	Duration of treatment/exposure: 24 hours Duration of treatment/exposure: 24 hours Fully reversible in 7 days or less	Irritation score: 0.4 -
	Rabbit - Skin - Erythema/Eschar Rabbit - Skin - Edema	Duration of treatment/exposure: 4 hours Duration of treatment/exposure: 4 hours	Irritation score: 0.8 Irritation score: 0.5
	Rabbit - Skin - Mild irritant	Duration of treatment/exposure: 4 hours	-
Epoxy resin (MW ≤ 700)	Rabbit - Skin - Mild irritant Rabbit - Eyes - Mild irritant	- -	- -
2,2-bis(acryloyloxymethyl)butyl acrylate	Rabbit - Skin - Irritant	-	-

Conclusion/Summary

Skin : Causes skin irritation.
Eyes : Causes serious eye irritation.
Respiratory : Based on available data, the classification criteria are not met.

Section 11. Toxicological information

Sensitization

Product/ingredient name	Species	Result
bis-[4-(2,3-epoxipropoxy)phenyl]propane	Mouse - skin	Result: Sensitizing
Epoxy resin (MW ≤ 700)	Mouse - skin	Result: Sensitizing
	OECD 429	
2,2-bis(acryloyloxymethyl)butyl acrylate	Rabbit - skin	Result: Sensitizing

Conclusion/Summary

Skin : May cause an allergic skin reaction.

Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Suspected of causing cancer.

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	Species	Result
hexaboron dizinc undecaoxide	Rat - Oral OECD 408 375 mg/kg [7 days per week] [90 days]	Fertility effects: Positive Maternal toxicity: Positive Developmental: Positive

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Section 11. Toxicological information

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

Aspiration hazard

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Information on the likely routes of exposure : Not available.

Potential acute health effects

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

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 pain or irritation
 watering
 redness
Inhalation : 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. Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Repeated exposure may lead to permanent respiratory disability. 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

Section 11. Toxicological information

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.

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	5205.8	8272.4	N/A	N/A	N/A
Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-	4200	2500	N/A	N/A	N/A
bis-[4-(2,3-epoxipropoxy)phenyl]propane	15000	23000	N/A	N/A	N/A
tris(2-chloro-1-methylethyl) phosphate	1500	N/A	N/A	N/A	N/A
Polyphosphoric acids, ammonium salts	4740	N/A	N/A	N/A	N/A
triphenyl phosphate	3500	N/A	N/A	N/A	N/A
Epoxy resin (MW ≤ 700)	2500	2500	N/A	N/A	N/A
Cashew, nutshell liq.	500	1100	N/A	N/A	N/A
2,2-bis(acryloyloxymethyl)butyl acrylate	5190	5170	N/A	N/A	N/A

Other information : Not available.

Section 12. Ecological information

Toxicity

Section 12. Ecological information

Product/ingredient name	Result	Species	Dose / Exposure
hexaboron dizinc undecaoxide	Acute - EC50	Daphnia - <i>Daphnia magna</i>	76 mg/l [48 hours]
Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-bis-[4-(2,3-epoxipropoxi)phenyl]propane	Acute - LC50	Fish - <i>Salmo gairdneri</i>	2.17 mg/l [96 hours]
	Acute - LC50	Fish	>100 mg/l [96 hours]
	Chronic - NOEC	Daphnia	0.3 mg/l [21 days]
Polyphosphoric acids, ammonium salts triphenyl phosphate	Acute - LC50 - Fresh water	Daphnia - <i>daphnia magna</i>	1.8 mg/l [48 hours]
	Acute - EC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	730.5 mg/l [48 hours]
	Chronic - NOEC	Algae - Green algae - <i>Desmodesmus subspicatus</i>	0.1 mg/l [3 days]
	Acute - LC50 - Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	0.09 mg/l [48 hours]
Epoxy resin (MW ≤ 700)	Chronic - NOEC	Daphnia	0.3 mg/l [21 days]
2,2-bis(acryloyloxymethyl)butyl acrylate	Acute - LC50	Daphnia	1.8 mg/l [48 hours]
	Acute - LC50	Fish	0.87 mg/l [96 hours]

Conclusion/Summary : Not available.

Persistence/degradability

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

Conclusion/Summary : Not available.

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

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
hexaboron dizinc undecaoxide	-	60960	High
tris(2-chloro-1-methylethyl)phosphate	2.68	7.94 [OECD 305 C]	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

Section 12. Ecological information

Mobility in soil

Soil/Water partition coefficient : 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

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

Additional information

Brazil : 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.

Risk number : 90

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.

Section 14. Transport information

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

References : ABNT NBR 14725: 2023 (April 2025)

Section 16. Other information

History

Date of previous issue : 8/7/2025

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Prepared by : EHS

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

 Indicates information that has changed from previously issued version.

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.