

SAFETY DATA SHEET



Date of issue/Date of revision

: 9 June 2021

Version

: 3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : PITT-CHAR NX BASE WHITE**Product code** : 00392638**Product type** : Liquid.**Other means of identification**

Not available.

1.2 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** : Product is not intended, labelled or packaged for consumer use.

1.3 Details of the supplier of the safety data sheet

Sigma Paints Egypt

Villa#8, street 279

New Maadi, Cairo

Egypt

Tel: 00202 516 223 797

Fax: 00202 516 38 04

**e-mail address of person
responsible for this SDS** : PS.ACEMEA@ppg.com**1.4 Emergency telephone
number** : +20 2 6840902

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

☑ Skin Irrit. 2, H315

Eye Irrit. 2, H319

Skin Sens. 1, H317

Repr. 2, H361d

Aquatic Acute 1, H400

Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :

SECTION 2: Hazards identification

- Signal word** : Warning
- Hazard statements** : Causes skin irritation.
 May cause an allergic skin reaction.
 Causes serious eye irritation.
 Suspected of damaging the unborn child.
 Very 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 vapour. Wash thoroughly after handling.
- Response** : Collect spillage.
- Storage** : Not applicable.
- Disposal** : Not applicable.
- Hazardous ingredients** : Hexaboron dizinc undecaoxide
 epoxy resin (MW ≤ 700)
 Cashew, nutshell liq.
 2,2-bis(acryloyloxymethyl)butyl acrylate
- Supplemental label elements** : Contains epoxy constituents. May produce an allergic reaction.
- Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.
- Special packaging requirements**
- Containers to be fitted with child-resistant fastenings** : Not applicable.
- Tactile warning of danger** : Not applicable.

2.3 Other hazards

- Product meets the criteria for PBT or vPvB** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
- Other hazards which do not result in classification** : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	% by weight	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
<input checked="" type="checkbox"/> Hexaboron dizinc undecaoxide	REACH #: 01-2119691658-19 EC: 235-804-2 CAS: 12767-90-7	≥10 - ≤25	Eye Irrit. 2, H319 Repr. 2, H361d (oral) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411	[1] [2]
epoxy resin (MW ≤ 700)	REACH #: 01-2119456619-26 EC: 500-033-5 CAS: 25068-38-6	≥10 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
Borate(5-), bis[μ-	REACH #: 01-2119970312-43	≥10 - ≤25	Repr. 2, H361d	[1] [2]
English (GB)			Egypt	2/14

SECTION 3: Composition/information on ingredients

oxotetraoxodiborato(4-)-, ammonium tetrahydrogen, dihydrate, (T-4)-phosphorous oxychloride, reaction products with propylene oxide triphenyl phosphate	CAS: 12046-04-7 REACH #: 01-2119486772-26 CAS: 1244733-77-4 EC: 204-112-2 CAS: 115-86-6	≥5.0 - ≤10 ≥5.0 - ≤10	Acute Tox. 4, H302 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1] [1]
Cashew, nutshell liq.	EC: 232-355-4 CAS: 8007-24-7	≥1.0 - <3.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317	[1]
2,2-bis(acryloyloxymethyl)butyl acrylate	REACH #: 01-2119489896-11 EC: 239-701-3 CAS: 15625-89-5 Index: 607-111-00-9	≥1.0 - ≤4.2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
Quaternary ammonium compounds, benzylbis (hydrogenated tallow alkyl)methyl, chlorides	EC: 263-082-9 CAS: 61789-73-9	≤0.30	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]

See Section 16 for the full text of the H statements declared above.

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

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

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of 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 recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

SECTION 4: First aid measures

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.

4.2 Most important symptoms and effects, both 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 foetal weight
 increase in foetal deaths
 skeletal malformations

Skin contact : Adverse symptoms may include the following:
 irritation
 redness
 reduced foetal weight
 increase in foetal deaths
 skeletal malformations

Ingestion : Adverse symptoms may include the following:
 reduced foetal weight
 increase in foetal deaths
 skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

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.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

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

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : 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 combustion products : Decomposition products may include the following materials:
 carbon oxides
 nitrogen oxides
 phosphorus oxides
 halogenated compounds
 metal oxide/oxides

SECTION 5: Firefighting measures**5.3 Advice for firefighters**

- Special precautions 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures**6.1 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 spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised 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".

- 6.2 Environmental precautions** : Avoid dispersal of spilt 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.

6.3 Methods and material 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 the 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 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 vapour 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

SECTION 7: Handling and storage

- 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.
- 7.2 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
- 7.3 Specific end use(s)**
See Section 1.2 for Identified uses.
- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
<p>Hexaboron dizinc undecaoxide</p> <p>Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-</p>	<p>ACGIH TLV (United States, 1/2013). TWA: 10 mg/m³, (Dusts and mists) Form: TWA: 3 mg/m³, (Dusts and mists) Form: Respirable fraction</p> <p>ACGIH TLV (United States). TWA: 3 mg/m³ Form: Respirable dust TWA: 10 mg/m³ Form: inhalable dust</p>

- 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 monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Exposure controls

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour 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.

Individual protection measures

SECTION 8: Exposure controls/personal protection

- 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. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
- 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.
- 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.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties**Appearance**

- Physical state** : Liquid.
- Colour** : Off-white.
- Odour** : Characteristic.
- Odour threshold** : Not available.
- pH** : insoluble in water.
- Melting point/freezing point** : May start to solidify at the following temperature: <-20°C (<-4°F) This is based on data for the following ingredient: 2,2-bis(acryloyloxymethyl)butyl acrylate.
- Initial boiling point and boiling range** : >37.78°C
- Flash point** : Closed cup: Not applicable.

SECTION 9: Physical and chemical properties

Evaporation rate : Not available.

Flammability (solid, gas) : liquid

Upper/lower flammability or explosive limits : Not available.

Vapour pressure

Ingredient name	Vapour Pressure at 20 °C			Vapour pressure at 50 °C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<input checked="" type="checkbox"/> Epoxy resin (MW ≤ 700)	<0.000075006	<0.00001				

Relative density : 1.56

Solubility(ies) : Insoluble in the following materials: cold water.

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

Auto-ignition temperature

Ingredient name	°C	°F	Method
<input checked="" type="checkbox"/> 2-bis(acryloyloxymethyl)butyl acrylate	385	725	EU A.15

Decomposition temperature : Stable under recommended storage and handling conditions (see Section 7).

Viscosity : Kinematic (40°C): >21 mm²/s

Explosive properties : Product does not present an explosion hazard.

Oxidising properties : Product does not present an oxidizing hazard.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.

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

10.6 Hazardous decomposition products : 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**11.1 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
	LD50 Dermal	Rabbit	>5000 mg/kg	-
epoxy resin (MW ≤ 700)	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Dermal	Rabbit	>2 g/kg	-
Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-	LD50 Oral	Rat	>2 g/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	-
triphenyl phosphate	LD50 Oral	Rat	630 to 2000 mg/kg	-
	LD50 Dermal	Rabbit	>7900 mg/kg	-
2,2-bis(acryloyloxymethyl)butyl acrylate	LD50 Oral	Rat	3500 mg/kg	-
	LD50 Dermal	Rabbit	5170 mg/kg	-
	LD50 Oral	Rat	5.19 g/kg	-

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

Acute toxicity estimates

Route	ATE value
Oral	4574.89 mg/kg
Dermal	67901.23 mg/kg

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
hexaboron dizinc undecaoxide	Eyes - Cornea opacity	Rabbit	33	24 hours 0.083g	74 hours
	Skin - Mild irritant	Rabbit	-	-	-
epoxy resin (MW ≤ 700)	Eyes - Mild irritant	Rabbit	-	-	-
	Skin - Irritant	Rabbit	-	-	-

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.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
epoxy resin (MW ≤ 700)	skin	Mouse	Sensitising
2,2-bis(acryloyloxymethyl)butyl acrylate	skin	Rabbit	Sensitising

Conclusion/Summary

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

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

Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

SECTION 11: Toxicological information

Product/ingredient name	Maternal toxicity	Fertility	Developmental 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 likely routes of exposure : Not available.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Eye contact : Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
reduced foetal weight
increase in foetal deaths
skeletal malformations

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Delayed and immediate effects as well as 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.

SECTION 11: Toxicological information**Potential chronic health effects**

Not available.

Conclusion/Summary : Not available.**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 the unborn child.**Other information** : Not available.

Sanding and grinding dusts may be harmful if inhaled. 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. In case of accidental skin contact, avoid direct exposure to the sun or other sources of UV light as severe irritation including burns may result. These reactions can be delayed – get medical attention if pain, irritation, rash or blistering occurs after contact.

SECTION 12: Ecological information**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
hexaboron dizinc undecaoxide	Acute EC50 76 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 2.17 mg/l	Fish - Salmo gairdneri	96 hours
epoxy resin (MW ≤ 700)	Acute LC50 1.8 mg/l	Daphnia	48 hours
	Chronic NOEC 0.3 mg/l	Daphnia	21 days
Borate(5-), bis[μ-oxotetraoxodiborato(4-)]-, ammonium tetrahydrogen, dihydrate, (T-4)-phosphorous oxychloride, reaction products with propylene oxide	Acute LC50 >100 mg/l	Fish	96 hours
	EC50 82 mg/l	Algae	72 hours
	EC50 131 mg/l	Daphnia	48 hours
	LC50 56.2 mg/l	Fish	96 hours
	NOEC 32 mg/l	Daphnia	48 hours
triphenyl phosphate	Acute EC50 0.55 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
2,2-bis(acryloyloxymethyl)butyl acrylate	Acute LC50 0.87 mg/l	Fish	96 hours

Conclusion/Summary : There are no data available on the mixture itself.**12.2 Persistence and degradability**

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

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
epoxy resin (MW ≤ 700)	-	-	Not readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

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

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods**Product**

Methods of disposal : The generation of waste should be avoided or minimised 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.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
Container	15 01 06 mixed packaging

Special precautions : 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	UN3082	UN3082	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Hexaboron dizinc undecaoxide, epoxy resin (MW ≤ 700))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
14.3 Transport hazard class(es)	9	9	9
14.4 Packing group	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.
Marine pollutant substances	Not applicable.	Hexaboron dizinc undecaoxide, Epoxy resin (MW ≤ 700))	Not applicable.

Additional information

- ADR/RID** : 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.

14.6 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.

14.7 Transport in bulk according to IMO instruments : Not applicable.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**[EU Regulation \(EC\) No. 1907/2006 \(REACH\)](#)[Annex XIV - List of substances subject to authorisation](#)[Annex XIV](#)

None of the components are listed.

[Substances of very high concern](#)

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

[Other national and international regulations.](#)[Ozone depleting substances \(1005/2009/EU\)](#)

SECTION 15: Regulatory information

Not listed.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms	:	ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number																				
Full text of abbreviated H statements	:	<table> <tr> <td>✔ H302</td> <td>Harmful if swallowed.</td> </tr> <tr> <td>H312</td> <td>Harmful in contact with skin.</td> </tr> <tr> <td>H315</td> <td>Causes skin irritation.</td> </tr> <tr> <td>H317</td> <td>May cause an allergic skin reaction.</td> </tr> <tr> <td>H318</td> <td>Causes serious eye damage.</td> </tr> <tr> <td>H319</td> <td>Causes serious eye irritation.</td> </tr> <tr> <td>H361d</td> <td>Suspected of damaging the unborn child.</td> </tr> <tr> <td>H400</td> <td>Very toxic to aquatic life.</td> </tr> <tr> <td>H410</td> <td>Very toxic to aquatic life with long lasting effects.</td> </tr> <tr> <td>H411</td> <td>Toxic to aquatic life with long lasting effects.</td> </tr> </table>	✔ H302	Harmful if swallowed.	H312	Harmful in contact with skin.	H315	Causes skin irritation.	H317	May cause an allergic skin reaction.	H318	Causes serious eye damage.	H319	Causes serious eye irritation.	H361d	Suspected of damaging the unborn child.	H400	Very toxic to aquatic life.	H410	Very toxic to aquatic life with long lasting effects.	H411	Toxic to aquatic life with long lasting effects.
✔ H302	Harmful if swallowed.																					
H312	Harmful in contact with skin.																					
H315	Causes skin irritation.																					
H317	May cause an allergic skin reaction.																					
H318	Causes serious eye damage.																					
H319	Causes serious eye irritation.																					
H361d	Suspected of damaging the unborn child.																					
H400	Very toxic to aquatic life.																					
H410	Very toxic to aquatic life with long lasting effects.																					
H411	Toxic to aquatic life with long lasting effects.																					
Full text of classifications [CLP/GHS]	:	<table> <tr> <td>Acute Tox. 4</td> <td>ACUTE TOXICITY - Category 4</td> </tr> <tr> <td>Aquatic Acute 1</td> <td>SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1</td> </tr> <tr> <td>Aquatic Chronic 1</td> <td>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1</td> </tr> <tr> <td>Aquatic Chronic 2</td> <td>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2</td> </tr> <tr> <td>Eye Dam. 1</td> <td>SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1</td> </tr> <tr> <td>Eye Irrit. 2</td> <td>SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2</td> </tr> <tr> <td>Repr. 2</td> <td>REPRODUCTIVE TOXICITY - Category 2</td> </tr> <tr> <td>Skin Irrit. 2</td> <td>SKIN CORROSION/IRRITATION - Category 2</td> </tr> <tr> <td>Skin Sens. 1</td> <td>SKIN SENSITISATION - Category 1</td> </tr> </table>	Acute Tox. 4	ACUTE TOXICITY - Category 4	Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1	Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1	Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2	Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2	Repr. 2	REPRODUCTIVE TOXICITY - Category 2	Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2	Skin Sens. 1	SKIN SENSITISATION - Category 1		
Acute Tox. 4	ACUTE TOXICITY - Category 4																					
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1																					
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1																					
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2																					
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1																					
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2																					
Repr. 2	REPRODUCTIVE TOXICITY - Category 2																					
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2																					
Skin Sens. 1	SKIN SENSITISATION - Category 1																					

History

Date of issue/ Date of revision : 9 June 2021

Date of previous issue : 28 May 2020

Prepared by : EHS

Version : 3

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 us, 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.