# SAFETY DATA SHEET

Date of issue/Date of revision : 1 December 2023 Version : 6.03



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

1.1 Product identifier

Product name : PSX 700 HARDENER

**Product code** : 000001100598

Other means of identification 00289940; 00289941; 00297162

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 Paint Saudi Arabia Ltd.

PO Box 7509 Dammam 31472 Saudi Arabia

Tel: 00966 138 47 31 00 Fax: 00966 138 47 17 34

e-mail address of person responsible for this SDS

: ndpic@sfda.gov.sa

1.4 Emergency telephone

number

: 00966 138473100 extn 1001

#### 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]

Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360FD STOT SE 2, H371 STOT RE 2, H373 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

PSX 700 HARDENER

### **SECTION 2: Hazards identification**

**Hazard pictograms** 











Signal word Danger

: Flammable liquid and vapour. **Hazard statements** 

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction. Suspected of causing genetic defects.

May damage fertility. May damage the unborn child.

May cause damage to organs.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

**Precautionary statements** 

**Prevention** : Wear protective gloves, protective clothing and eye or face protection. Keep away from

heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid

release to the environment. Do not breathe vapour.

Response : Collect spillage. **Storage** : Not applicable.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and

international regulations.

P280, P210, P273, P260, P391, P501

**Hazardous ingredients** 3-aminopropyltriethoxysilane

dibutylbis(pentane-2,4-dionato-O,O')tin

Supplemental label

elements

: Not applicable.

**Annex XVII - Restrictions** on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

: Restricted to professional users.

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 : Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause

irritation.

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# **SECTION 3: Composition/information on ingredients**

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
3-aminopropyltriethoxysilane	REACH #: 01-2119480479-24 EC: 213-048-4 CAS: 919-30-2 Index: 612-108-00-0	≥90	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317	ATE [Oral] = 1570 mg/ kg	[1]
dibutylbis(pentane- 2,4-dionato-O,O')tin	REACH #: 01-2119557817-24 EC: 245-152-0 CAS: 22673-19-4 Index: 650-056-00-0	≥5.0 - <10	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360FD STOT SE 1, H370 STOT RE 1, H372 (immune system) Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 1864 mg/ kg M [Acute] = 1 M [Chronic] = 1	[1] [2]
ethanol	REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Eye Irrit. 2, H319  See Section 16 for the full text of the H statements declared above.	_	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### <u>Type</u>

Ingestion

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

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

4. I Description of his	t did illedoules
Eye contact	<ul> <li>Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.</li> </ul>
Inhalation	<ul> <li>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.</li> </ul>
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.</li> </ul>

: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

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### **SECTION 4: First aid measures**

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

#### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

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

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

**Skin contact**: Causes severe burns. May cause damage to organs following a single exposure in

contact with skin. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Harmful if swallowed. Corrosive to the digestive tract. Causes burns. May cause

damage to organs following a single exposure if swallowed.

#### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:

pain 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:

pain or irritation

redness dryness cracking

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

**Ingestion** : Adverse symptoms may include the following:

stomach pains

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 dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing** 

media

: Do not use water jet.

#### 5.2 Special hazards arising from the substance or mixture

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# **SECTION 5: Firefighting measures**

Hazards from the substance or mixture

: Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. 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

metal oxide/oxides Formaldehyde.

#### 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe 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. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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.

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# **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 breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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.

# 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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidising materials. 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.

# **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
dibutylbis(pentane-2,4-dionato-O,O')tin	ACGIH TLV (United States). Absorbed through skin.  STEL: 0.2 mg/m³  ACGIH TLV (United States, 1/2022). [Tin, organic compounds as Sn] Absorbed through skin.  TWA: 0.1 mg/m³, (as Sn) 8 hours.  STEL: 0.2 mg/m³, (as Sn) 15 minutes.
ethanol	ACGIH TLV (United States, 1/2022). Notes: 1996 Adoption Refers to Appendix A Carcinogens.  STEL: 1000 ppm 15 minutes.

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Recommended monitoring procedures

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

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### **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
Skin protection
Hand protection

: Chemical splash goggles and face shield.

: 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** 

**Body protection** 

: nitrile neoprene

: 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. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

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 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.

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# **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 : Colourless. Odour : Amine-like. **Odour threshold** Not available.

Melting point/freezing point : May start to solidify at the following temperature: 25.1°C (77.2°F) This is based on

data for the following ingredient: dibutylbis(pentane-2,4-dionato-O,O')tin. Weighted

average: 4.61°C (40.3°F)

Initial boiling point and

boiling range

: >37.78°C

: Not available.

Ingredient name

**Flammability** 

Upper/lower flammability or

explosive limits

: Greatest known range: Lower: 3.3% Upper: 19% (ethanol)

Closed cup: 47°C Flash point

**Auto-ignition temperature** 

dibutylbis(pentane-2,4-dionato-O,O')tin 400 EU A.15 752

**Decomposition temperature** 

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

°F

Method

°C

pН Not applicable. insoluble in water. Kinematic (40°C): >21 mm<sup>2</sup>/s **Viscosity** 

**Viscosity** 60 - 100 s (ISO 6mm)

Solubility(ies)

Media	Result
cold water	Not soluble

Partition coefficient: n-octanol/: Not applicable.

water

Vapour pressure	:	In ave dient neme	Vapour Pressure at 20°C			Vapour pressure at 50°C			
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
		ethanol	42.95	5.7					

**Evaporation rate** 1.7 (ethanol) compared with butyl acetate

Relative density 0.96 Bulk density (g/cm³) 0.963

Vapour density : Highest known value: 1.6 (Air = 1) (ethanol).

The product itself is not explosive, but the formation of an explosible mixture of **Explosive properties** 

vapour or dust with air is possible.

**Oxidising properties** 

**Particle characteristics** 

: Product does not present an oxidizing hazard.

Median particle size : Not applicable.

#### 9.2 Other information

No additional information.

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### **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 Formaldehyde. metal oxide/oxides

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
3-aminopropyltriethoxysilane	LC50 Inhalation Dusts and mists	Rat	>7.35 mg/l	4 hours
	LD50 Dermal	Rabbit	4 g/kg	-
	LD50 Oral	Rat	1.57 g/kg	-
dibutylbis(pentane-2,4-dionato-O,O')tin	LD50 Dermal	Rat	>2000 mg/kg	-
, ,	LD50 Oral	Rat	1864 mg/kg	-
ethanol	LC50 Inhalation Vapour	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rat	17100 mg/kg	-
	LD50 Oral	Rat	7 g/kg	-

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

Irritation/Corrosion
Conclusion/Summary

Skin

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
3-aminopropyltriethoxysilane	skin	Guinea pig	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** 

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

**Carcinogenicity** 

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

Reproductive toxicity

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# **SECTION 11: Toxicological information**

**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)

Product/ingredient name	Category	Route of exposure	Target organs
dibutylbis(pentane-2,4-dionato-O,O')tin	Category 1	-	-

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
dibutylbis(pentane-2,4-dionato-O,O')tin	Category 1	-	immune system

#### **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 : Harmful if swallowed. Corrosive to the digestive tract. Causes burns. May cause

damage to organs following a single exposure if swallowed.

**Skin contact**: Causes severe burns. May cause damage to organs following a single exposure in

contact with skin. Defatting to the skin. May cause an allergic skin reaction.

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

#### 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:

stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

pain or irritation redness dryness cracking

blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations

**Eye contact**: Adverse symptoms may include the following:

pain watering redness

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Short term exposure** 

Potential immediate : Not

effects

: Not available.

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# **SECTION 11: Toxicological information**

Potential delayed effects: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects: Not available.

#### Potential chronic health effects

Not available.

Conclusion/Summary

: Not available.

**General** 

May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

Carcinogenicity

: No known significant effects or critical hazards.

Mutagenicity

: Suspected of causing genetic defects.

Reproductive toxicity

: May damage fertility. May damage the unborn child.

Other information

: Not available.

Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C/140F. Avoid contact with skin and clothing.

#### 11.2 Information on other hazards

### 11.2.1 Endocrine disrupting properties

Not available.

#### 11.2.2 Other information

Not available.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
3-aminopropyltriethoxysilane ethanol	Acute LC50 >934 mg/l Acute EC50 7640 mg/l Fresh water	Fish Daphnia - <i>Daphnia</i> <i>magna</i>	96 hours 48 hours

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

#### 12.2 Persistence and degradability

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ethanol	-	-	Readily

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
3-aminopropyltriethoxysilane	1.7	3.4	Low
ethanol	-0.35	-	Low

#### 12.4 Mobility in soil

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# **SECTION 12: Ecological information**

Soil/water partition coefficient (Koc)

: Not available.

: 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 Endocrine disrupting properties

Not available.

**Mobility** 

#### 12.7 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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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### **SECTION 14: Transport information**

	ADR/RID	IMDG	IATA	
14.1 UN number or ID number	UN3470	UN3470	UN3470	
14.2 UN proper shipping name	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE	PAINT, CORROSIVE, FLAMMABLE	
14.3 Transport hazard class(es)	8 (3)	8 (3)	8 (3)	
14.4 Packing group	II	II	II	
14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.	
Marine pollutant substances	Not applicable.	(dibutylbis(pentane- 2,4-dionato-O,O')tin)	Not applicable.	

#### **Additional information**

ADR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or

≤5 kg.

**IMDG**: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation

regulations.

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

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Toxic to reproduction	dibutylbis(pentane-2,4-dionato-O,O')tin	Candidate	D(2020) 4578-DC	6/25/2020

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

mixtures and articles

: Restricted to professional users.

Other national and international regulations.

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### **SECTION 15: Regulatory information**

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

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

H225 Highly flammable liquid and vapour.H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H360FD May damage fertility. May damage the unborn child.

H370 Causes damage to organs.H371 May cause damage to organs.

H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.

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]

: Acute Tox. 4 ACUTE TOXICITY - Category 4
Aquatic Acute 1 SHORT-TERM (ACUTE) AQUA

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

Flam. Liq. 2
Flam. Liq. 2
Flam. Liq. 3
FLAMMABLE LIQUIDS - Category 2
FLAMMABLE LIQUIDS - Category 3
Muta. 2
GERM CELL MUTAGENICITY - Category 2
Repr. 1B
Skin Corr. 1B
Skin Corr. 1B
Skin Corr. 1C
SKIN CORROSION/IRRITATION - Category 1C

Skin Sens. 1 SKIN SENSITISATION - Category 1

STOT RE 1 SPECIFIC TARGET ORGAN TOXICITY - REPEATED

EXPOSURE - Category 1

STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED

**EXPOSURE - Category 2** 

STOT SE 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE

EXPOSURE - Category 1

STOT SE 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE

**EXPOSURE - Category 2** 

**History** 

Date of issue/ Date of : 1 December 2023

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### **SECTION 16: Other information**

Date of previous issue : 6 September 2023

Prepared by : EHS Version : 6.03

#### **Disclaimer**

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