# SAFETY DATA SHEET



The information in this Safety Data Sheet is required pursuant to GHS UN rev. 7

Date of issue/Date of revision 28 November 2022

Version 12.04

### Section 1. Identification **Product code** : 00267449 **Product name** : SIGMAGUARD 603 HARDENER **Product type** : Liquid. Other means of identification Not available. Relevant identified uses of the substance or mixture and uses advised against **Product use** : Coating. Professional applications, Used by spraying. **Uses advised against** : Product is not intended, labelled or packaged for consumer use. **Supplier's information** : PPG Asian Paints Private Limited 6A Shanti Nagar Santa Cruz (East) Mumbai - 400055 India **Emergency telephone** : +91 22 6815 8700 number:

# Section 2. Hazards identification

Classification of the substance or mixture	<ul> <li>FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SKIN CORROSION/IRRITATION - Category 1A SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SKIN SENSITISATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 3.2% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 3.4%</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 21.1%</li> </ul>
GHS label elements	
Hazard pictograms	
Signal word	: Danger

Product code 00267449 Product name SIGMAGUARD 603 HARDENER

Se	ction	2.	Hazards	ident	tific	a	tior	า	
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Hazard statements	:	Flammable liquid and vapour. Harmful if swallowed. Toxic in contact with skin or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure.
Precautionary statements		Toxic to aquatic life with long lasting effects.
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. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapour. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	:	Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	:	Store locked up.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not : Prolonged or repeated contact may dry skin and cause irritation.

result in classification

## Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

### **CAS** number/other identifiers ~ • ~

<b>CAS number</b> : Not applicable.		
Ingredient name	%	CAS number
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) benzyl alcohol butanone 2,4,6-tris(dimethylaminomethyl)phenol N-(3-(trimethoxysilyl)propyl)ethylenediamine	50 - 100 10 - <20 5 - <10 3 - <5 3 - <5	6864-37-5 100-51-6 78-93-3 90-72-2 1760-24-3

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 necess	sary first aid measures
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>
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>

Most important symptoms	s/effects, acute and delayed
Potential acute health ef	fects
Eye contact	: Causes serious eye damage.
Inhalation	: Toxic if inhaled.
Skin contact	: Causes severe burns. Toxic in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed.
<u>Over-exposure signs/syr</u>	nptoms
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains

Indication of immediate med	dical attention and special treatment needed, if necessary
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. 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.

See toxicological information (Section 11)

# Section 5. Firefighting measures

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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.
Specific hazards arising from the chemical	: 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 thermal decomposition products	: Decomposition products may include the following materials: carbon oxides nitrogen oxides metal oxide/oxides Formaldehyde.
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. 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	<ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</li> </ul>

# Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

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	sewers, water courses, basements or confined areas. Wash spillages into effluent treatment plant or proceed as follows. Contain and collect spillage combustible, absorbent material e.g. sand, earth, vermiculite or diatomace and place in container for disposal according to local regulations (see Sect Dispose of via a licensed waste disposal contractor. Contaminated absorb material may pose the same hazard as the spilt product. Note: see Section	an with non- ous earth ion 13).
Large spill	<ul> <li>appropriate waste disposal container. Dispose of via a licensed waste disp contractor.</li> <li>Stop leak if without risk. Move containers from spill area. Use spark-proof explosion-proof equipment. Approach the release from upwind. Prevent e</li> </ul>	oosal tools and
Methods and material for con Small spill	<ul> <li>ntainment and cleaning up</li> <li>Stop leak if without risk. Move containers from spill area. Use spark-proof explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and pla</li> </ul>	
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways and sewers. Inform the relevant authorities if the product has caused envir pollution (sewers, waterways, soil or air). Water polluting material. May be to the environment if released in large quantities. Collect spillage.	ronmental
	information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
For non-emergency personnel For emergency responders		el from ources. st. i is
For non-omorgonov	No action shall be taken involving any narrounal risk or without suitable train	lina

# Section 6. Accidental release measures

emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

<b>Precautions</b>	for safe	handling
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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. 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.
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.

### Section 8. Exposure controls/personal protection

### Control parameters

### **Occupational exposure limits**

Ingredient name	Exposure limits
<b>b</b> utanone	ACGIH TLV (United States, 1/2022)
	STEL: 885 mg/m <sup>3</sup> 15 minutes.
	STEL: 300 ppm 15 minutes.
	TWA: 590 mg/m <sup>3</sup> 8 hours.
	TWA: 200 ppm 8 hours.

procedures : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls : 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.

# Section 8. Exposure controls/personal 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.
Individual protection measure	<u>es</u>	
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	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Gloves	:	nitrile neoprene
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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
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	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

# Section 9. Physical and chemical properties

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

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Colourless.
Odour	: Aromatic.
Odour threshold	: Not available.
Melting point/freezing point	: Not available.
Boiling point, initial boiling point, and boiling range	: >37.78°C (>100°F)
Flammability	: Not available.

Product code 00267449

# Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits	:	Not available.	Not available.						
Flash point	:	Closed cup: 52°C (125.6°F)							
Auto-ignition temperature	:	Ingredient name		°C	°F		Meth	od	
		2,2'-dimethyl-4,4'-methyl (cyclohexylamine)	enebis	275	527				
Decomposition temperature	:	Not available.							
рН	:	Not applicable.							
Viscosity	:	Kinematic (40°C): >2	21 mm²/s						
Solubility(ies)		Media	Re	sult					
Solubility(les)	1	cold water	No	t soluble					
Partition coefficient: n- octanol/water	:	Not applicable.							
Vapour pressure	4	Vapour Pressure at 20°C         Vapour pressure at 50°C							
		Ingredient name mm Hg kPa Method mm kPa Method Hg							
		putanone	78.76	10.5					
Relative density	:	0.96			•	•	·		
Relative vapour density	:	Not available.							
Particle characteristics									
Median particle size	1	Not applicable.							
Evaporation rate	1	Not available.							
Section 10. Stabili	ty	and reactivity	ty						
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 hi products.	gh temper	atures m	ay produc	e hazard	ous de	comp	osition
Incompatible materials	:	Keep away from the oxidising agents, stro				nt strong e	exother	mic re	eactions:
								<i>.</i>	

Hazardous decomposition<br/>products: Depending on conditions, decomposition products may include the following<br/>materials: carbon oxides nitrogen oxides Formaldehyde. metal oxide/oxidesHazardous polymerisation: Under normal conditions of storage and use, hazardous polymerisation will not<br/>occur.

# Section 11. Toxicological information

### Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2,2'-dimethyl-4,4'- methylenebis	LC50 Inhalation Dusts and mists	Rat	420 mg/m <sup>3</sup>	4 hours
(cyclohexylamine)				
	LD50 Dermal	Rabbit	>0.2 g/kg	-
	LD50 Oral	Rat	>0.32 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m <sup>3</sup>	4 hours
-	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
butanone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
2,4,6-tris	LD50 Dermal	Rabbit	1.28 g/kg	-
(dimethylaminomethyl) phenol				
P	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
N-(3-(trimethoxysilyl)propyl) ethylenediamine	LD50 Oral	Rat	2413 mg/kg	-
Conclusion/Summary	: There are no data available on	the mixture itse	elf.	

### Irritation/Corrosion

	Result	Species	Score	Exposure	Observation
2,4,6-tris (dimethylaminomethyl) phenol	Skin - Visible necrosis	Rabbit	-	4 hours	7 days
Conclusion/Summary					
Skin	: There are no data avai	lable on the mi	xture itself.		
Eyes	: There are no data avai	lable on the mi	xture itself.		
Respiratory	: There are no data avai	lable on the mi	xture itself.		
<u>Sensitisation</u>					
Conclusion/Summary					
Skin	: There are no data avai	lable on the mi	xture itself.		
Respiratory	: There are no data avai	lable on the mi	xture itself.		
<u>Mutagenicity</u>					
Conclusion/Summary	: There are no data avai	lable on the mi	xture itself.		
Carcinogenicity					
Conclusion/Summary	: There are no data avai	lable on the mi	xture itself.		
Reproductive toxicity					
Conclusion/Summary	: There are no data avai	lable on the mi	xture itself.		
Teratogenicity					
Conclusion/Summary	: There are no data avai	lable on the mi	xture itself.		
Specific target organ toxici	<u>ty (single exposure)</u>				

# Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
butanone	Category 3	-	Narcotic effects
Specific target organ toxicity (repeate	<u>d exposure)</u>		
Name	Category	Route of exposure	Target organs

2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine) Category 2			exposure	
	2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	Category 2	-	-

	Asp	<u>iration</u>	hazard	
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Name	Result
	ASPIRATION HAZARD - Category 2 ASPIRATION HAZARD - Category 2

Information on likely routes of exposure	1	Not available.
Potential acute health effects		
Eye contact	:	Causes serious eye damage.
Inhalation	:	Toxic if inhaled.
Skin contact	1	Causes severe burns. Toxic in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	:	Harmful if swallowed.
Symptoms related to the phy Eye contact		cal, chemical and toxicological characteristics Adverse symptoms may include the following:
		pain watering redness
Inhalation		No specific data.
Skin contact	:	Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Ingestion	:	Adverse symptoms may include the following: stomach pains
Delayed and immediate effec	<u>ts</u>	as well as chronic effects from short and long-term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>

### Section 11. Toxicological information

### 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	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

### Numerical measures of toxicity

### Acute toxicity estimates

Route	ATE value
Øral	619.31 mg/kg
Dermal	402.81 mg/kg
Inhalation (vapours)	348.31 mg/l
Inhalation (dusts and mists)	0.64 mg/l

### Other information

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. Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. 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.

# Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
₽,4,6-tris (dimethylaminomethyl)phenol	Acute LC50 175 mg/l	Fish	96 hours

### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol	-	-	Readily

### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
2,2'-dimethyl-4,4'- methylenebis (cyclohexylamine)	1.8	-	low
benzyl alcohol	0.87	-	low
butanone	0.3	-	low
2,4,6-tris (dimethylaminomethyl)phenol	0.219	-	low

### Mobility in soil

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# Section 12. Ecological information

Soil/water partition coefficient (Koc)

: 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 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. 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. 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.

# Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN3470	UN3470	UN3470
UN proper shipping name	PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE	PAINT RELATED MATERIAL CORROSIVE, FLAMMABLE	PAINT RELATED MATERIAL CORROSIVE, FLAMMABLE
Transport hazard class(es)	8 (3)	8 (3)	8 (3)
Packing group	I	II	II
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(2,2'-dimethyl-4,4'- methylenebis (cyclohexylamine))	Not applicable.

### **Additional information**

UN	: None identified.
IMDG	: The marine pollutant mark is not required when transported in sizes of $\leq$ 5 L or $\leq$ 5 kg.
IATA	: The environmentally hazardous substance mark may appear if required by other transportation regulations.

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.

### Section 14. Transport information

Transport in bulk according : Not applicable. to IMO instruments

# Section 15. Regulatory information

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 28 November 2022
Date of previous issue	: 4/22/2022
Version	: 12.04
Prepared by	: EHS
ey to abbreviations	<ul> <li>ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations</li> </ul>

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 3	Calculation method
ACUTE TOXICITY (inhalation) - Category 3	Calculation method
SKIN CORROSION/IRRITATION - Category 1A	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	Calculation method
SKIN SENSITISATION - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2	Calculation method
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2	Calculation method

✓ Indicates information that has changed from previously issued version.

### Notice to reader

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by 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.