# **SAFETY DATA SHEET**

Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013



Date of issue/Date of revision 17 October 2024

Version 13

Section 1. Chemi	cal product and company identification
Product code	: 00269262
Product name	: NOVAGUARD 890 BASE WHITE
Product name	: NOVAGUARD 890 BASE WHITE
Product type	: Liquid.
Relevant identified uses of	the substance or mixture and uses advised against
Product use	: Professional applications, Used by spraying.
Use of the substance/ mixture	: Coating.
Uses advised against	: Not applicable.
Supplier's details	: PPG Coatings (Kunshan) Co., Ltd 53 Jinyang Road, Lujia Town, 215331 Kunshan City, Jiangsu Province, P.R. China Tel: 86 512 57678859 Fax: 86 512 57678857
Emergency telephone number (with hours of operation)	: 00 86 532 83889090

# Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Emergency overview

Liquid. White.

Aromatic.

May be harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F).

F exposed or concerned: Get medical advice or attention. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor. IF IN EYES: Immediately call a POISON CENTER or doctor.

See Section 12 for environmental precautions.

# Section 2. Hazards identification

Classification of the substance or mixture	<ul> <li>CUTE TOXICITY (dermal) - Category 5 SKIN CORROSION/IRRITATION - Category 1C SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 73.6%</li> <li>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 47.3%</li> </ul>
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>May be harmful in contact with skin.</li> <li>Causes severe skin burns and eye damage.</li> <li>May cause an allergic skin reaction.</li> <li>Causes serious eye damage.</li> <li>May damage fertility or the unborn child.</li> <li>May cause damage to organs through prolonged or repeated exposure.</li> <li>Toxic to aquatic life.</li> <li>Toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statements	
Prevention	: Øbtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment. Do not breathe vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: Collect spillage. IF exposed or concerned: Get medical advice or attention. 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. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. 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.
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Storage	: Store locked up.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Physical and chemical hazards	: No known significant effects or critical hazards.

### Product name NOVAGUARD 890 BASE WHITE

# Section 2. Hazards identification

### **Health hazards**

: Zauses severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May damage fertility or the unborn child.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effec	ts and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Environmental hazards	: Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Other hazards which do not result in classification	: None known.

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

# **CAS number/other identifiers**

pplicable.

# Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol	25 - <40	9003-36-5
1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl) oxirane	10 - <25	30499-70-8
benzyl alcohol	1 - <10	100-51-6
Phenol, polymer with formaldehyde, glycidyl ether (MW<=700)	1 - <10	28064-14-4
Talc , not containing asbestiform fibres	1 - <10	14807-96-6
crystalline silica, respirable powder (<10 microns)	1 - <10	14808-60-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

SUB codes represent substances without registered CAS Numbers.

# Section 4. First aid measures

Description of necessary first aid measures				
Eye contact	<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	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.			
Ingestion	<ul> <li>If swallowed, seek medical advice immediately and show this container or label.</li> <li>Keep person warm and at rest. Do NOT induce vomiting.</li> </ul>			

Most important s	vmi	otoms/effects. a	acute	and	delav	/ed

Potential acute health effects	
Eye contact	: Causes serious eye damage.
Inhalation	: 📈 known significant effects or critical hazards.
Skin contact	: Causes severe burns. May be harmful in contact with skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympto	<u>ms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

### Product name NOVAGUARD 890 BASE WHITE

## Section 4. First aid measures

Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

**ction 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. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst. 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 halogenated compounds 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.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

Personal precautions, protec	tiv	e equipment and emergency procedures
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
		Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
Methods and materials for co	onta	ainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and more up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and

Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

Precautions for safe handling
 i 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 vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

# Section 7. Handling and storage

Conditions for safe storage, including any	: 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
incompatibilities	sunlight in a dry, cool and well-ventilated area, away from incompatible materials
	(see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully
	resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10
	for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

### **Control parameters**

### **Occupational exposure limits**

Ingredient name		Exposure limits			
Image of the second state of the second st		GBZ 2.1 (China, 11/2022)PC-TWA 8 hours: 3 mg/m³. Form: totaldust.PC-TWA 8 hours: 1 mg/m³. Form:respirable dust.GBZ 2.1 (China, 11/2022)PC-TWA 8 hours: 0.7 mg/m³. Form:respirable dust, 10% ≤ free SiO2 ≤ 50%.PC-TWA 8 hours: 0.3 mg/m³. Form:respirable dust, 50% < free SiO2 $\leq$ 80%.PC-TWA 8 hours: 0.2 mg/m³. Form:respirable dust, free SiO2 $\geq$ 80%.			
Recommended monitoring procedures		appropriate monitoring standards. Reference to for methods for the determination of hazardous ed.			
Appropriate engineering controls	local exhaust ventilation or oth	We user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.			
Environmental exposure controls	they comply with the requirem cases, fume scrubbers, filters	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.			
ndividual protection measu	ires				
Hygiene measures	eating, smoking and using the Appropriate techniques should Contaminated work clothing s contaminated clothing before	<ul> <li>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.</li> <li>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.</li> </ul>			
		e			
Eye protection Skin protection	: Chemical splash goggles and	face shield.			

Product name NOVAGUARD 890 BASE WHITE

# Section 8. Exposure controls/personal protection

dard should ent indicates anufacturer, rties. It
y be sisting of ely
n the task ecialist
ld be should be
evels, the ator. If nust use ir-fed licates this is

# Section 9. Physical and chemical properties

<u>Appearance</u>				
Physical state	1	Liquid.		
Color	1	White.		
Odor	1	Aromatic.		
Boiling point	1	>37.78°C (>100°F	=)	
Flash point	:	Closed cup: 101°C	C (213.8°F)	
Lower and upper explosive (flammable) limits	:	Not available.		
Relative density	1	1.52		
Solubility/ico)		Media	Result	
Solubility(ies)	•	cold water	Not soluble	
Auto-ignition temperature	:	110°C (230°F)		
Viscosity	:	Øynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C): >21 mm²/s		
Viscosity	:	60 - 100 s (ISO 6n	mm)	

China Page: 8/14

# Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of haza reactions	<b>rdous</b> : Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoi	<ul> <li>When exposed to high temperatures may produce hazardous decomposition products.</li> </ul>
Incompatible mate	rials : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decom products	<ul> <li>Depending on conditions, decomposition products may include the following materials: carbon oxides halogenated compounds Formaldehyde. metal oxide/ oxides</li> </ul>

# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol	LD50 Oral	Rat	>10000 mg/kg	-
1,3-Propanediol, 2-ethyl-2- (hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	LD50 Dermal	Rabbit	>3170 mg/kg	-
	LD50 Oral	Rat	3398 mg/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Dermal LD50 Oral	Rabbit Rat	>2000 mg/kg 1200 mg/kg	-

### Irritation/Corrosion

Not available.

### **Sensitization**

Not available.

### **Mutagenicity**

Not available.

## **Carcinogenicity**

Not available.

### **Reproductive toxicity**

Not available.

### **Teratogenicity**

Not available.

# Section 11. Toxicological information

Name	Category	Route of exposure	Target organs           Respiratory tract           irritation	
Talc , not containing asbestiform fibres	Category 3	-		
Specific target organ toxicity (repeated exposure)				
Name	Category	Route of exposure	Target organs	
crystalline silica, respirable powder (<10 microns)	Category 1	inhalation	-	

### **Aspiration hazard**

Name	Result
benzyl alcohol	ASPIRATION HAZARD - Category 2

### Information on the likely : Not available. routes of exposure Potential acute health effects

r otoritiar addite ribuitir eribett	
Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes severe burns. May be harmful in contact with skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

### <u>Delayed and immediate effects and also chronic effects from short and long term exposure</u> <u>Short term exposure</u>

# Section 11. Toxicological information

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
General	: May cause damage to organs through prolonged or repeated exposure. 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	: May damage fertility or the unborn child.

### Numerical measures of toxicity

### Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
OVAGUARD 890 BASE WHITE 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane benzyl alcohol	5326.6 3398 1200	3095.9 2500 2500		N/A N/A N/A	N/A N/A N/A

### Other information

Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/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).

# Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Acute LC50 2.54 mg/l	Fish	96 hours
1,3-Propanediol, 2-ethyl-2- (hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	EC50 3.7 mg/l Fresh water	Daphnia	48 hours
	LC50 75 mg/l	Fish	96 hours

### Persistence/degradability

Product name NOVAGUARD 890 BASE WHITE

# Section 12. Ecological information

Product/ingredient name	Test	Result		Dose		Inoculum
<b>7</b> ,3-Propanediol, 2-ethyl-2- (hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	OECD 301F	8 % - Not re	eadily - 28 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
<b>1</b> ,3-Propanediol, 2-ethyl-2- (hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane benzyl alcohol	-		-		Not rea	,

### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
reaction products with 1-chloro-2,3-epoxypropane and phenol	2.7	-	Low
benzyl alcohol	0.87	-	Low

### <u>Mobility in soil</u>

Soil/water partition: Not available.coefficient (Koc)

Other adverse effects

: No known significant effects or critical hazards.

# Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

# Section 14. Transport information

Product name NOVAGUARD 890 BASE WHITE

# Section 14. Transport information

	-			
	China	UN	IMDG	ΙΑΤΑ
UN number	UN3066	UN3066	UN3066	UN3066
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	8	8	8	8
Packing group	III	Ш	III	Ш
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	Not applicable.	(Epoxy Resin)	Not applicable.

### Additional information

CN	: None identified.
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.

Transport in bulk according : Not applicable. to IMO instruments

# Section 15. Regulatory information

China inventory (IECSC)	: All components are listed or exempted.
References	<ul> <li>Production Safety Law of the People's Republic of China Code of Occupational Disease Prevention of the People's Republic of China Environmental Protection Law of the People's Republic of China Fire Control Law of the People's Republic of China Regulations on the Control over Safety of Dangerous Chemicals Occupational exposure limits for hazardous agents in the workplace chemical hazardous agents (GBZ2.1) General rule for classification and hazard communication of chemicals (GB13690) Safety data sheet for chemical products - Content and order of sections (GB/ T16483) Guidance on the compilation of safety data sheet for chemical products (GB/ T17519) General rule for preparation of precautionary label for chemicals (GB15258) Safety rules for classification, precautionary labeling and precautionary statements of chemicals (GB30000.2-29)</li> </ul>

# Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 17 October 2024
Date of previous issue	: 1/9/2023
Version	: 13
	EHS
Key to abbreviations	: ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
	ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
	UN = United Nations

**V** 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 PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.