SAFETY DATA SHEET

STEELGUARD 951 HARDENER BLACK



Date of issue 18 September

2024

Version 1.01

1. Product and company identification

Product name : STEELGUARD 951 HARDENER BLACK

Product code : 00468619 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 PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe

652-0803 Japan; Tel: +81-78-574-2777

Emergency telephone

number

: 078 574 2777

2. Hazards identification

GHS Classification : ACUTE TOXICITY (dermal) - Category 4

ACUTE TOXICITY (inhalation) - Category 4

SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD -

Category 3

GHS label elements

Hazard pictograms :







Signal word : Danger

Hazard statements : Harmful in contact with skin or if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction. Suspected of causing cancer.

Causes damage to organs. (respiratory organs)

Causes damage to organs through prolonged or repeated exposure. (respiratory

organs, urinary tract)

Harmful to aquatic life with long lasting effects.

Precautionary statements

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2. Hazards identification

Prevention

: Obtain 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. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. 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

IF exposed or concerned: Call a POISON CENTER or doctor. 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 : Causes digestive tract burns.

result in classification

3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

CAS number : Not applicable. **CSCL** number : Not available.

Ingredient name	%	CAS number	CSCL
Melamine Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	50 - 100	108-78-1	5-1024
	20 - <25	68082-29-1	7-401
m-Xylylenediamine 3,6-diazaoctanethylenediamin carbon carbon black N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan- 1-amide)	15 - <20	1477-55-0	3-2888; 3-308
	2 - <3	112-24-3	2-163; 7-5
	1 - <2	7440-44-0	Not available.
	0.2 - <0.5	1333-86-4	5-3328; 5-5222
	0.1 - <0.2	123-26-2	2-2720

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.

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4. First aid measures

Description of necessary first aid measures

Eye contact: 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.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label.

Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled.

Skin contact: Causes severe burns. Harmful in contact with skin. Causes damage to organs

following a single exposure in contact with skin. May cause an allergic skin reaction.

Ingestion : Corrosive to the digestive tract. Causes burns. Causes 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 : No specific data.

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

Indication of immediate medical 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)

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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 harmful 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

halogenated compounds metal oxide/oxides

for fire-fighters

Special protective actions : 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

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.

6. Accidental release measures

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 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".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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6. Accidental release measures

7. Handling and storage

Precautions for safe handling

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

Conditions for safe storage: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
	Japan Society for Occupational Health (Japan, 5/2023). Skin sensitizer.

procedures

Recommended monitoring: 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.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

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8. Exposure controls/personal protection

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye protection

Skin protection

: Chemical splash goggles and face shield.

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.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

9. Physical and chemical properties

Appearance

Solubility(ies)

Physical state : Liquid.

Odor : Characteristic.

Boiling point : >37.78°C (>100°F)

Flash point : Closed cup: Not applicable.

Relative density : 1.28

Γ

Media Result

cold water Not soluble

10. Stability and reactivity

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

Chemical stability: The product is stable.

Possibility of hazardous

reactions

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

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10. Stability and reactivity

Conditions to avoid

: When exposed to high temperatures may produce hazardous decomposition products.

Incompatible materials

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

Hazardous decomposition

products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
M elamine	LC50 Inhalation Dusts and mists	Rat	>5190 mg/m ³	4 hours
	LD50 Oral	Rat	3161 mg/kg	-
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	_
m-Xylylenediamine	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LD50 Dermal	Rat - Male, Female	>3100 mg/kg	-
	LD50 Oral	Rat	930 mg/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	-
carbon black	LD50 Oral	Rat	>10 g/kg	-
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	LC50 Inhalation Dusts and mists	Rat	>5.11 mg/l	4 hours
·	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
m-Xylylenediamine	Skin - Irritant Skin - Severe irritant	Human Rat	- -	- 4 hours	- 4 hours

Sensitization

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11. Toxicological information

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin	Mouse	Sensitizing
m-Xylylenediamine 3,6-diazaoctanethylenediamin	skin skin	Mouse Guinea pig	Sensitizing Sensitizing

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
m-Xylylenediamine 3,6-diazaoctanethylenediamin	Category 1 Category 3	-	respiratory organs Respiratory tract irritation
carbon	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	3.3	Route of exposure	Target organs
Melamine	Category 1	-	urinary tract
m-Xylylenediamine	Category 1		respiratory organs
carbon black	Category 1		respiratory organs

Aspiration hazard

Not available.

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled.

Skin contact: Causes severe burns. Harmful in contact with skin. Causes damage to organs

following a single exposure in contact with skin. May cause an allergic skin reaction.

Ingestion : Corrosive to the digestive tract. Causes burns. Causes damage to organs following

a single exposure if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

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11. Toxicological information

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

blistering may occur

Adverse symptoms may include the following: Ingestion

stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects

: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

General : Causes damage to organs through prolonged or repeated exposure. Once

sensitized, a severe allergic reaction may occur when subsequently exposed to very

low levels.

: Suspected of causing cancer. Risk of cancer depends on duration and level of Carcinogenicity

exposure.

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

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)
TEELGUARD 951 HARDENER BLACK Melamine Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	3773.6	1339.4	N/A	N/A	2.2
	3161	N/A	N/A	N/A	N/A
	2500	2500	N/A	N/A	N/A
m-Xylylenediamine 3,6-diazaoctanethylenediamin N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan- 1-amide)	930	1100	N/A	N/A	0.5
	N/A	300	N/A	N/A	N/A
	2500	2500	N/A	N/A	N/A

Other information

Causes digestive tract burns. Exposure to amine vapor has been reported to cause transient corneal edema described as blue haze, halo effect, foggy or blurred vision for several hours. This condition is typically temporary and does not cause permanent visual effects. When the proper eye protection specified in Section 8 is worn, exposure is significantly reduced and the condition has not been observed.

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12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Melamine Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Acute EC50 200 mg/l EC10 1.78 mg/l	Daphnia Algae	48 hours 72 hours
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	Acute EC50 29 to 43 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
,	Acute EC50 94 mg/l	Daphnia - Daphnia magna	48 hours

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide)	-	63 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine N,N'-ethane-1,2-diylbis (12-hydroxyoctadecan-1-amide)	-	-	Not readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Melamine m-Xylylenediamine	-1.22 0.18	3.8 2.69	Low Low
3,6-diazaoctanethylenediamin N,N'-ethane-1,2-diylbis		-	Low High
(12-hydroxyoctadecan- 1-amide)			

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

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

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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.

14. Transport information

	UN	IMDG	IATA
UN number	UN3066	UN3066	UN3066
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	8	8	8
Packing group	II	II	II
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

: None identified. UN **IMDG** : None identified. **IATA** : None identified.

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

15. Regulatory information

Fire Service Law

None of the components are listed.

Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Status	Reference number
1,3,5-Triazine-2,4,6-triamine	54	Class 1	682
Triethylenetetramine	2.2	Class 2	278

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15. Regulatory information

Industrial Safety and Health Act

Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

None of the components are listed.

Substance(s) requiring labelling

Ingredient name	%		Reference number
r Xylylenediamine	≥10 - ≤20	Listed	555

Chemicals requiring notification

Ingredient name	%	Status	Reference number
m-Xylylenediamine	≥10 - ≤20	Listed	555
Carbon black	≤10	Listed	130

Carcinogens based on Article 577-2 of the Ordinance on ISH

None of the components are listed.

Mutagen

None of the components are listed.

: Not listed **Corrosive liquid**

Occupational Safety and

Health Law

: Not applicable.

: Not listed

: Not listed

: Not listed

Regulations on the

Prevention of Tetraalkyl

Lead Poisoning

Harmful Substances

Subject to Obtaining

Permission for Manufacturing

Harmful Substances,

Prohibited for Manufacturing

Lead regulation : Not listed

Organic solvents poisoning prevention : Not applicable.

Poisonous and Deleterious Substances

Ingredient name	%	Status	Reference number
-Xylylenediamine	16.454	Deleterious	2-1-4-9

Chemical Substances Control Law (CSCL)

None of the components are listed.

High Pressure Gas Control: Not available.

Law

Explosives Control Law

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15. Regulatory information

None of the components are listed.

Law concerning prevention: Not available. of pollution of the ocean

Maritime Safety Law

Notification Regulating Transportation of Dangerous Materials by Sea

None of the components are listed.

Container class

None of the components are listed.

JSOH Carcinogen : Group 2B **List of Specially Controlled** : Not listed

Industrial Waste

: All components are listed or exempted.

Japan inventory **Road law**

: Not available.

16. Other information

History

Date of issue/Date of

revision

: 18 September 2024

Date of previous issue : 3/4/2024 Version : 1.01 : EHS Prepared by

Key to abbreviations

: ADN = European Provisions concerning the International Carriage of Dangerous

Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

RID = The Regulations concerning the International Carriage of Dangerous Goods

by Rail

UN = United Nations

▼ Indicates information that has changed from previously issued version.

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.

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