

Safety Data Sheet according to Regulation (EC) 'No. 2020/878

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier RBNGA Revision Date: 22/03/2023

Product Name: RUSTBOND NG - PART A Supersedes Date: 06/10/2022

Version Number: 3

UFI Code: Not determined

Nanoform:

1.2 Relevant identified uses of the

substance or mixture and uses advised against

Base component of 2 components coating - Industrial use. Please see Technical Data

Sheet. Advised against: others than recommended

Product to be mixed with: RUSTBOND NG - PART B / RUSTBOND NG FC - PART B

Mixing ratio by volume Part A/

Part B:

1/1

1.3 Details of the supplier of the safety data sheet

Manufacturer: Api S.p.a.

Via della tecnologia, 7 Z.I San Marco 07041 Alghero (SS)

Italy

Supplier: Carboline Italia, S.p.a.

Via Margherita Viganò De Vizzi, 77 20092 Cinisello Balsamo (MI)

Italy

Regulatory / Technical Information: +32 67493710 Nivelles, Belgium +39 0294759236 Cinisello Balsamo, Italy

Datasheet Produced by: Paiotta, Alice - hms@carboline.com

1.4 Emergency telephone number: CHEMTREC +1 703 5273887 (Outside US)

112 (24/7)

Croatia +3851 2348 342 (24/7 in Croatian and English)

Iceland 112 (24/7) Malta 112 (24/7)

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

Other EU extensions	EUH205
Skin Irritation, category 2	H315
Skin Sensitizer, category 1	H317
Eye Irritation, category 2	H319
Hazardous to the aquatic environment, Chronic, category 2	H411

2.2 Label elements

Symbol(s) of Product





Signal Word

Warning

Named Chemicals on Label

bis[4-(2,3-epoxypropoxy)phenyl]propane, Polypropyleneglycol-epichlorohydrin copolymer

HAZARD STATEMENTS

Other EU extensions	EUH205	Contains epoxy constituents. May produce an allergic reaction.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.
PRECAUTION PHRASES		
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/ face protection.
	P302+352	IF ON SKIN: Wash with plenty of soap and water.
	P333+313	If skin irritation or rash occurs: Get medical advice/attention.
	P337+313	If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

Endocrine disrupting properties - Toxicity

Name According to EEC

CAS-No.

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

Endocrine disrupting properties - Ecotoxicity

Name According to EEC

CAS-No.

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

SECTION 3: Composition/Information On Ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Hazardous ingredients

Name According to EEC EINEC No. CAS-No. REACH Reg No.	<u>%</u>	<u>Classifications</u>	,	SCL Value: ATE Value: M-Factor:
bis[4-(2,3-epoxypropoxy)phenyl] propane 216-823-5 1675-54-3 01-2119456619-26	75-100	H315-317-319-411 Aquatic Chronic 2, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1	SCL Value: ATE Value: M-Factor:	-
Benzene, (tetrapropenyl) derivs. 270-954-2 68512-02-7 No Information	2.5 - <10	H304 Asp. Tox. 1	SCL Value: ATE Value: M-Factor:	-
Polypropyleneglycol- epichlorohydrin copolymer polymer 9072-62-2 No Information	2.5 - <10	H317-319-335-412 Aquatic Chronic 3, Eye Irrit. 2, Skin Sens. 1B, STOT SE 3 RTI	SCL Value: ATE Value: M-Factor:	-

Remarks: Note P

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

SECTION 4: First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: Show this safety data sheet to the doctor in attendance.

AFTER INHALATION: Move to fresh air. Provide fresh air, rest and warmth. Call a physician immediately. Give oxygen or artificial respiration if needed. When risk of unconsciousness, place and transport the victim in secured recovery position. AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Do not use solvent or thinners to clean skin. AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

AFTER INGESTION: If vomiting occurs spontaneously: Keep head below hips to prevent aspiration of stomach vomit into lungs. Provide fresh air, rest and warmth. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

May cause sensitization by skin contact. Irritating to eyes and skin.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11. When symptoms persist or in all cases of doubt seek medical advice.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above. Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Heating or fire conditions liberates toxic gas. Flash back possible over considerable distance. As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Vapours may form explosive mixtures with air. Solvent vapours are heavier than air and may spread along floors and ignite.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Keep containers and surroundings cool with water spray.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition.

6.1.2 For emergency responders

See Section 7, 8 and 10 for further information.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

FURTHER INSTRUCTIONS: Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Electrical equipment should be protected to the appropriate standard. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist. Use only explosion-proof equipment. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Apply technical measures to comply with the occupational exposure limits (see section 8). People handling polyurethane or epoxy products must have received special training according to guidelines from the National Occupational Health and Safety Board. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Avoid heat, sparks, flames and other ignition sources. **STORAGE CONDITIONS:** Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Keep container closed. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Store in upright position only.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits

(EU)

<u>Name</u>	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
bis[4-(2,3-epoxypropoxy)phenyl]propane	1675-54-3				
Benzene, (tetrapropenyl) derivs.	68512-02-7				
Polypropyleneglycol-epichlorohydrin copolymer	9072-62-2				
Solvent naphtha (petroleum), light arom.	64742-95-6				

Name CAS-No. OEL Note

bis[4-(2,3-epoxypropoxy)phenyl]propane 1675-54-3

Benzene, (tetrapropenyl) derivs. 68512-02-7

Polypropyleneglycol-epichlorohydrin

copolymer

9072-62-2

Solvent naphtha (petroleum), light arom. 64742-95-6

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation. Annotations: Carc = Capable of causing cancer and/or heritable genetic damage, Sen = Capable of causing occupational asthma, Sk = Can be absorbed through the skin.

Chemical Name:

bis[4-(2,3-epoxypropoxy)phenyl]propane

EC No.: 216-823-5 **CAS-No.:** 1675-54-3

DNELs - Derived no effect level

	Workers				Cons	sumers		
Route of	Acute effect	Acute effects	Chronic effects	Chronic effects	Acute effect	Acute effects	Chronic effects	Chronic effects
Exposure	local	systemic	local	systemic	local	systemic	local	systemic
Oral	Not required				0.75 mg/kg		0.75 mg/kg bw/	
· · · · · · · · · · · · · · · · · · ·				bw/day		day		
Inhalation		12.25 mg/m3		12.25 mg/m3				-
Dermal		8.33 mg/kg		8.33 mg/kg bw/		3.571 mg/kg		3.571 mg/kg bw.
	_	bw/day		day		bw/day		day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.006 mg/l
Fresh water sediments	0.996 mg/L
Marine water	0.0006 mg/l
Marine sediments	0.0996 mg/kg
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	0.196 mg/kg
Air	

Chemical Name:

Solvent naphtha (petroleum), light arom.

EC No.: CAS-No.: 265-199-0 64742-95-6

DNELs - Derived no effect level

	Workers				Cons	sumers		
Route of	Acute effect	Acute effects	Chronic effects	Chronic effects	Acute effect	Acute effects	Chronic effects	Chronic effects
Exposure	local	systemic	local	systemic	local	systemic	local	systemic
Oral	Not required					11 mg/kg bw/		
						day		
Inhalation				150 mg/m ³			-	32 mg/m³
Dermal				25 mg/kg bw/day				11 mg/kg bw/day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.635 mg/l
Fresh water sediments	3.29 mg/kg
Marine water	0.0635 mg/l
Marine sediments	0.329 mg/kg
Food chain	
Microorganisms in sewage treatment	100 mg/l
soil (agricultural)	0.29 mg/kg
Air	

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Wear a self-contained breathing apparatus or full-face airline respirator during spraying operations and long-term exposure. When working in confined or poorly ventilated spaces, a battery powered assisted airfed mask must be used. When painting small areas, or when using a roller or brush, respiratory protection with combination filter (dust and gas filter, EN 14387:2004+A1:2008) may be used: Gas filter type A2 (organic substances). Dust filter P3 (for fine dust).

EYE PROTECTION: If splashes are likely to occur, wear: Face-shield, tightly fitting safety goggles (EN 166).

HAND PROTECTION: Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Use chemical resistant gloves and lotions and barrier creams to prevent drying of the skin. Protective gloves complying with EN 374: Butyl rubber. Nitril rubber. Recommended glove material for mixed product: Protective gloves complying with EN 374: Butyl rubber. Nitril rubber.

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

ENGINEERING CONTROLS: Ensure adequate ventilation, especially in confined areas.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties Colour: Yellow

Physical State Liquid
Odor Epoxy

Odor threshold Not determined

pH Not determined

Melting point / freezing point (°C) Not determined

Boiling point or initial boiling point

and boiling range (°C)

225 - 250

Flash Point, (°C) 96

Evaporation rate Not determined Flammability (solid, gas) Not determined

Llower and upper explosive limit Not determined

Vapour Pressure Not determined

Relative vapour density >1 (air = 1)

Density and/or relative density Not determined

Solubility in / Miscibility with water Negligible

Partition coefficient: n-octanol/water

Auto-ignition temperature (°C)

Decomposition temperature (°C)

Kinematic viscosity

Not determined

Not determined

Particle characteristics Not applicable to liquids

9.2 Other information

VOC Content g/I: PART B

Grams of VOC per liter of coating product as applied per ISO 11890-1 and/or ISO 11890-2.

Specific Gravity (g/cm3) 1.15

SECTION 10: Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions. No reactivity hazards known under recommended storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No reactivity hazards known under recommended storage and use conditions. No reactivity hazards known under normal storage and use conditions.

10.4 Conditions to avoid

Avoid heat, sparks, flames and other ignition sources.

10.5 Incompatible materials

Keep away from strong oxidising agents and strongly acid or alkaline materials.

10.6 Hazardous decomposition products

In case of fire or hot work operations, hazardous decomposition products may be formed such as:Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), aliphatic amines, aldehydes.

SECTION 11: Toxicological information

11.1 Information on hazard classes as definied in Regulation (EC) No 1272/2008

Acute Toxicity:

Oral LD50: No information available.

Inhalation LC50: No information available.

Dermal LD50: No Information

Irritation: Skin and eye irritant

Corrosivity: No information available.

Sensitization: Skin sensitizer, category 1

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name According to EEC	Oral LD50	Dermal LD50	Vapor LC50	Gas LC50	Dust/Mist LC50
1675-54-3	bis[4-(2,3-epoxypropoxy) phenyl]propane	5000 mg/kg (oral-rat)	>2000 mg/kg (dermal, rat M-F)	No information	No information	No information
68512-02-7	Benzene, (tetrapropenyl) derivs.	>5000 mg/kg (rat)	>10000 mg/kg (rabbit)	No information	No information	No information

9072-62-2	Polypropyleneglycol- epichlorohydrin copolymer	>2000 mg/kg (rat)	>2000 mg/kg (rabbit)	No information	No information	No information
64742-95	Solvent naphtha (petroleum), light arom.	8400 mg/kg, oral, rat	No information	3670 ppm/8 hours, rat, inhalation	No information	No information

Additional Information:

Chronic exposure causes drying effect on the skin and eczema. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Repeated skin contact leads to irritation and to sensitisation, possible with cross-sensitisation to other epoxies. Chronic exposure has been associated with various neurotoxic effects including permanent brain damage. The product is irritating to the eyes and may cause sensitisation to the respiratory system. Swallowing concentrated chemical may cause severe internal injury. Inhalation of vapour or mist can cause headache, nausea, irritation of nose, throat, and lungs.

11.2 Information on other hazards

Endocrine disrupting properties - Toxicity

Name According to EEC

CAS-No.

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

SECTION 12: Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information

No information

No information

No information

No information

No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB The produ

assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Ecotoxicity

Name According to EEC CAS-No.

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

12.7 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
1675-54-3	bis[4-(2,3-epoxypropoxy)phenyl]propane	1.8 mg/l (Daphnia magna, EC50, 48h,static)	11 mg/l (Scenedesmus capricornutum,EC50r, 72h)	1.5 mg/L (Rainbow trout), 3.6 mg/L (fish)
68512-02-7	Benzene, (tetrapropenyl) derivs.	No information	No information	>1000 mg/l

9072-62-2 Polypropyleneglycol-epichlorohydrin

copolymer

90 mg/l (OECD TG 202) No information

67 mg/l (Leuciscus idus)

64742-95-6 Solvent naphtha (petroleum), light arom.

3.2 mg/l (EC50, 48h, Daphnia magna)

2.6 mg/l (IC50, 72h Pseudokirchneriella subcapitata)

No information

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local state, and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems.

European Waste Code: No Information Packaging Waste Code: No Information

SECTION 14: Transport Information

		ADR/RID	ADN	IMDG	IATA
14.1	UN-number or ID number	UN3082	UN3082	UN3082	UN3082
14.2	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTACE, LIQUID, N.O.S (bis[4-(2,3-epoxypropoxy)phenyl] propane)	ENVIRONMENTAL LY HAZARDOUS SUBSTACE, LIQUID, N.O.S (bis [4-(2,3- epoxypropoxy) phenyl]propane)	ENVIRONMENTALLY HAZARDOUS SUBSTACE, LIQUID, N.O.S (bis[4-(2,3- epoxypropoxy)phenyl] propane)	ENVIRONMENTALLY HAZARDOUS SUBSTACE, LIQUID, N.O.S (bis[4-(2,3-epoxypropoxy)phenyl] propane)
14.3	Transport Hazard Class(es)	9	9	9	9
14.4	Packing Group	III	III	Ш	III
14.5	Enviromental Hazards	Marine Pollutant: YES (bis[4-(2,3-epoxypropoxy)phenyl] propane)	Marine Pollutant: YES (bis[4-(2,3- epoxypropoxy) phenyl]propane)	Marine Pollutant: YES (bis[4-(2,3-epoxypropoxy)phenyl] propane)	Marine Pollutant: YES (bis [4-(2,3-epoxypropoxy) phenyl]propane)
		l	1		

14.6 Special precautions for user Not applicableEmS-No.: F-A, S-F

14.7 Maritime transport in bulk according to IMO Not applicable intruments

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

National Regulations:

Denmark Product Registration Number: Not available

Danish MAL Code: Not available

Danish MAL Code - Mixture: Not available

Sweden Product Registration Number: Not available

Norway Product Registration Number: Not available

Germany WGK Class: Not available

Directive 2004/42/CE: 500 g/l (subcat j)

Covered by Directive 2012/18/EC (Seveso III):

Restrictions to product or to substances according

to Annex XVII, Regulation (CE) 1907/2006: Entry 3

Annex XIV, Regulation (CE) 1907/2006 - Authorisation List:

CAS-No. Name According to EEC

Not Applicable

SVHC - Substances of very high concern (Candidate List - Art. 59 REACH):

CAS-No. Name According to EEC

Not Applicable

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other Information

Text for CLP Hazard Statements shown in Section 3 describing each ingredient:

H226	Flammable liquid and vapour.
11//0	LIGITITIADI C ILUUIU ATIU VAUOUL.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

Reasons for revision

Substance and/or Product Properties Changed in Section(s):

- 01 Identification
- 02 Hazard Identification
- 03 Composition/Information On Ingredients
- 09 Physical and Chemical Properties
- 11 Toxicological Information
- 13 Disposal Information
- 14 Transportation Information
- 15 Regulatory Information

Revision Statement(s) Changed

This Safety Data Sheet (SDS) has been revised to meet the new EU CLP requirements. There have been both formatting and content changes based on the CLP classification (if applicable), please review each section of the SDS for specific changes. . .

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
- Joint Research Centre in Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments. Regulation (EC) 1272/2006 with subsequent amendments.
- Commission Regulation (EU) 2020/878
- EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

Acronym & Abbreviation Key:

CLP Classification, Labeling & Packaging Regulation

EC European Commission
EU European Union
US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit

ppm Parts per million

mg/m3 Milligrams per cubic meter TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits
VOC Volatile organic compounds

g/l Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration
IC50 Half maximal inhibitory concentration
PBT Persistent bioaccumulative toxic chemical
vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

IBC International Bulk Container RTI Respiratory Tract Irritation

NE Narcotic Effects

IMO International Maritime Organization

Note P: The classification as a carcinogen or mutagen need not apply; the substance

contains less than 0,1 % w/w benzene

Note 10: The classification as a carcinogen by inhalation applies only to mixtures in

powder form containing 1 % or more of titanium dioxide which is in the form

of

or incorporated in particles with aerodynamic diameter \leq 10 μm .

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.