

Safety Data Sheet according to Regulation (EC) No. 2015/830



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

1.1 Product Identifier 10093S... Revision Date: 04/11/2016

Product Name: CARBOGUARD 893 SG - A Supercedes Date: 21/10/2015

Version Number: 1

1.2 Relevant identified uses of the

substance or mixture and uses

advised against

Base component of 2 components coatings - Industrial use.

Product to be mixed with: CARE

Mixing ratio by volume Part A/

Part B:

CARBOGUARD 893 SG (LT) - B 1 / 1

1.3 Details of the supplier of the safety data sheet

Importer: StonCor Europe

9, Rue du Travail - 1400 Nivelles, Belgium

Manufacturer: Carboline Italia, S.p.a.

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20092 Cinisello Balsamo (MI)

Italy

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Datasheet Produced by:

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SECTION 2: Hazard 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
Flammable Liquid, category 3 H226
Skin Irritation, category 2 H315
Skin Sensitizer, category 1 H317
Eye Irritation, category 2 H319

Acute Toxicity, Inhalation, category 4	H332
STOT, repeated exposure, category 1	H372
Hazardous to the aquatic environment, Chronic, category 2	H411

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

xylene, quartz (silicon dioxide), poly(bisphenol a-co-epichlorohydrin), glycidyl end-capped, Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)

HAZARD STATEMENTS

Other EU extensions	EUH205	Contains epoxy constituents. May produce an allergic reaction.
Flammable Liquid, category 3	H226	Flammable liquid and vapour.
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.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.
PRECAUTION PHRASES		
	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/ face protection.
	P302+P352	IF ON SKIN: Wash with plenty of water and soap.
	P305+P351+P33	IF IN EYES: Rinse cautiously with water for several minutes.
	8	Remove contact lenses, if present and easy to do so. Continue rinsing.
	P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
ADDITIONAL INFORMATION		
	**	Note P: The classification as a carcinogen or mutagen need not apply; the substance contains less than 0,1 % w/w

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

No information

SECTION 3: Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

CAS-No.	EINEC No.	Name According to EEC	<u>%</u>
13463-67-7	236-675-5	titanium dioxide	10-25
14808-60-7	238-878-4	quartz (silicon dioxide)	10-25

benzene

25036-25-3	607-500-3	poly(bisphenol a-co-epichlorohydrin), glycidyl end-capped	10-25
1330-20-7	215-535-7	xylene	10-25
25068-38-6	500-033-5	Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)	10-25
7779-90-0	231-944-3	trizinc bis(orthophosphate)	2.5-10
100-41-4	202-849-4	Ethylbenzene	2.5-10
108-65-6	203-603-9	2-methoxy-1-methylethyl-acetate	1.0-2.5
7631-86-9	231-545-4	silicon dioxide (amorphous)	1.0-2.5
64742-95-6	265-199-0	Solvent naphtha (petroleum), light arom.**	0.1-1.0

CAS-No.	REACH Reg No.	CLP Symbols	CLP Hazard Statements	M-Factors
13463-67-7	01-2119489379-17			
14808-60-7		GHS08	H372	
25036-25-3	polymer	GHS07	H315-317-319	
1330-20-7	01-2119488216-32	GHS02-GHS07-GHS08	H226-312-315-332-319-335-304	
25068-38-6	01-2119456619-26	GHS07-GHS09	H315-317-319-411	
7779-90-0	01-2119485044-40	GHS09	H400-410	1
100-41-4		GHS02-GHS07-GHS08	H225-304-315-319-332-373-412	
108-65-6	01-2119475791-29	GHS02	H226	
7631-86-9	01-2119379499-16			
64742-95-6	01-2119455851-35	GHS02-GHS07-GHS08-GHS09	H226-304-319-335-336-411	

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: When symptoms persist or in all cases of doubt seek medical advice.

AFTER INHALATION: Move to fresh air.

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.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. 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

Irritating to eyes. Irritating to skin. May cause sensitization by skin contact. Danger of serious damage to health by prolonged exposure. Prolonged or repeated exposure increases the risk.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Fire-fighting 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.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. Water sprayDry powderAlcohol-resistant foamCarbon dioxide (CO2)Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

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 13 for further information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours may form explosive mixtures with air. 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. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. Do not breathe vapours or spray mist. Use only explosion-proof equipment. Keep away from sources of ignition - No smoking. 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: Direct sources of heat. Extremes of temperature and direct sunlight.

STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

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 (UK WELS)

<u>Name</u>	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3	OEL Note
titanium dioxide	13463-67-7			10 (total dust)	4 (resp. dust)	
quartz (silicon dioxide)	14808-60-7				0.1	
poly(bisphenol a-co-epichlorohydrin), glycidyl end-capped	25036-25-3					
xylene	1330-20-7	50	100	441	220	Sk
Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)	25068-38-6					
trizinc bis(orthophosphate)	7779-90-0					
Ethylbenzene	100-41-4	100	125	552	441	Sk
2-methoxy-1-methylethyl-acetate	108-65-6	50	100	548	274	Sk
silicon dioxide (amorphous)	7631-86-9					
Solvent naphtha (petroleum), light arom.**	64742-95-6				100	

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.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Respirator with a vapor filter. Wear respiratory protection with combination filter (dust and gas filter, EN 141) during spraying operations: Gas filter type A1 (organic substances). Dust filter P3 (for fine dust).

EYE PROTECTION: Tightly fitting safety goggles. Safety glasses with side-shields conforming to EN166.

HAND PROTECTION: Rubber or plastic gloves. Long sleeved clothing. Remove and wash contaminated clothing before reuse. Rubber or plastic apron. Protective gloves complying with EN 374: Nitrile rubber. Butyl rubber.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

Chemical Name:

titanium dioxide

EC No.: CAS-No.: 236-675-5 13463-67-7

DNELs - Derived no effect level

	Workers				Consumers			
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required						700 mg/kg/ bw/	
								day
Inhalation			10 mg/m ³				10 mg/m ³	
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	>1 mg/L
Fresh water sediments	1000 mg/kg
Marine water	0.127 mg/L
Marine sediments	100 mg/kg
Food chain	1667 mg/kg
Microorganisms in sewage treatment	100 mg/kg
soil (agricultural)	100 mg/kg d w
Air	

Chemical Name:

xylene

EC No.: CAS-No.: 215-535-7 1330-20-7

DNELs - Derived no effect level

	Workers				Consumers			
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required						1.6 mg/kg bw/	
	,							day
Inhalation	289 mg/m ³	289 mg/m ³		77 mg/m ³	174 mg/m ³	174 mg/m ³		14.8 mg/m ³
Dermal				180 mg/kg bw/				108 mg/kg bw/
				day				day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.327 mg/L
Fresh water sediments	12.46 mg/kg
Marine water	0.327 mg/L
Marine sediments	12.46 mg/kg
Food chain	
Microorganisms in sewage treatment	6.58 mg/L
soil (agricultural)	2.31 mg/kg
Air	

Chemical Name:

Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)

EC No.: CAS-No.: 500-033-5 25068-38-6

DNELs - Derived no effect level

	Workers					Con	sumers	
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects 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	
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:

2-methoxy-1-methylethyl-acetate

EC No.: CAS-No.: 203-603-9 108-65-6

DNELs - Derived no effect level

	Workers			Consumers				
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral		Not required			<u> </u>		1.67 mg/kg	
Inhalation				275 mg/m ³				33 mg/m³
Dermal				153.5 mg/kg				54.8 mg/kg

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	

Chemical Name:

Solvent naphtha (petroleum), light arom.**

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

DNELs - Derived no effect level

	Workers			Consumers				
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects 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	

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: various colors

Physical State LIQUID
Odor SOLVENT

Odor threshold Not determined

pH N/D

Melting point / freezing point (°C)

Not determined

85 - 260 °C

Flash Point, (°C) 24

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

Upper/lower flammability or explosive

limits

Not determined

Relative density Not determined Solubility in / Miscibility with water Not determined Partition coefficient: n-octanol/water Not determined Auto-ignition temperature (°C) Not determined Decomposition temperature (°C) Not determined Viscosity Not determined **Explosive properties** Not determined Oxidising properties Not determined

9.2 Other information

VOC Content g/l: 336

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

Specific Gravity (g/cm3) 1.59

SECTION 10: Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under recommended storage conditions. StableRisk of ignition.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Direct sources of heat. Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No Information Inhalation LC50: No Information

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

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
13463-67-7	titanium dioxide	>5000 mg/kg (oral-rat)	10000	
25036-25-3	poly(bisphenol a-co-epichlorohydrin), glycidyl end-capped	>2000 mg/kg (oral-rat)	>2000 mg/kg (dermal- rat)	
1330-20-7	xylene	>2000 mg/kg, rat, oral	3200 mg/kg, rabbit, dermal	20 mg/L (inh/vapour/rat)

25068-38-6	Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)	5000 mg/kg rat, oral	>2000 mg/kg dermal, ra M-F	t
7779-90-0	trizinc bis(orthophosphate)	5000 mg/kg, oral rat		
100-41-4	Ethylbenzene	3500 mg/kg rat, oral		
108-65-6	2-methoxy-1-methylethyl-acetate	8532 mg/kg, (oral, rat)	>5000 mg/kg (dermal, rat)	1105 mg/m3/4H
7631-86-9	silicon dioxide (amorphous)	>5110 mg/kg (oral, rat)	> 5000 mg/kg (dermal, rabbit)	
64742-95-6	Solvent naphtha (petroleum), light arom.**	4700 mg/kg, oral, rat	,	3670 ppm/8 hours, rat, inhalation

Additional Information:

This product may contain Ethyl Benzene, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. This product may contain Quartz (silicon dioxide), which is listed by IARC as a known carcinogenic to humans (Group 1). This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. This product may contain Titanium Dioxide, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. This classification is relevant when exposed to titanium dioxide in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.

SECTION 12: Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information
No information
No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB No information

assessment:

12.6 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	<u>LC50 96hr</u>
13463-67-7	titanium dioxide	>100 mg/l (EC50, 48h, Daphnia magna OECD202)	16 mg/l (EC50, 72h, Pseudokirchnerella subcapitata)	>100 mg/l (EC50, 96h, Oncorhynchus Mykiss OECD203)
14808-60-7	quartz (silicon dioxide)	No information	No information	
25036-25-3	poly(bisphenol a-co-epichlorohydrin), glycidyl end-capped	No information	No information	
1330-20-7	xylene	165 mg/L (Daphnia magna 24h)	3 - 5 mg/L (Selenastrum sp.)	2 - 11 mg/L (Roccus saxatilis), 8.2 mg/L (Salmo gairdneri), 13.5 mg/L (Lepomis macrichirus), 21.0 mg/L (Pimephales promelas)
25068-38-6	Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)	1.8mg/l (Daphnia magna, EC50, 48h,static)	11 mg/l (Scenedesmus capricornutum,EC50r, 72h)	1.5 mg/L (Rainbow trout), 3.6 mg/L (fish)
7779-90-0	trizinc bis(orthophosphate)	No information	No information	0.14-0.26 mg Zn++/L (Oncorhynchus mykiss)
100-41-4	Ethylbenzene	No information	No information	No information
108-65-6	2-methoxy-1-methylethyl-acetate	408 mg/L	No information	161 mg/L
7631-86-9	silicon dioxide (amorphous)	No information	No information	10000 mg/l (Brachydanio rerio - Static)
64742-95-6	Solvent naphtha (petroleum), light arom.**	No information	2,6 mg/l(C50,72h Pseudokirchneriella subcapitata)	

Further Ecological Information

Contains the following ingredients which are classified as water dangerous according to EEC directive No. 76/464/EEC in percentages > 1%.

CAS-No. Name According to EEC

25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average

molecular weight <= 700)

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. Empty containers should be taken to an approved waste handling site for recycling or disposal.

European Waste Code: 080111*
Packaging Waste Code: 150110

SECTION 14: Transport Information

14.1 UN number UN126314.2 UN proper shipping name PAINT

Technical name Not applicable

14.3 Transport hazard class(es) 3

Subsidiary shipping hazard Not applicable

14.4 Packing group

14.5 Environmental hazards Marine Pollutant: YES (Bisphenol A Epoxy Resin, Trizinc bis

(orthophosphate))

14.6 Special precautions for user Not applicable

EmS-No.: F-E, S-E

14.7 Transport in bulk according to Annex II

of MARPOL 73/78 and the IBC code

Not applicable

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

WGK Class: 2

Directive 2004/42/CE: 400 g/l (subcat j)

Chemical Safety Assessment:

Norway Product Registration Number:

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

SECTION 16: Other Information

Not available

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

Product Composition Changed

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

09 - Physical & Chemical Information

13 - Disposal Information

14 - Transportation Information

15 - Regulatory Information

Statement(s) Changed

Changes have been made to Section 2 of the Safety Data Sheet (SDS). Please refer to the Hazard Identification information in Section 2 of this SDS. Changes have been made to Section 3 of the Safety Data Sheet (SDS). Please refer to the Composition / Information on Ingredients in Section 3 of this SDS. Changes have been made to Section 8 of the Safety Data Sheet (SDS). Please refer to the Exposure Controls / Personal Protection information in Section 8 of the SDS. Changes have been made to Section 9 of the Safety Data Sheet (SDS). Please refer to the Physical and Chemical Properties information in Section 9 of this SDS. Changes have been made to Section 15 of the Safety Data Sheet (SDS). Please refer to the Regulatory Information in Section 15 of this SDS. 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; European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;

European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP); EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes".

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

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.