

# Safety Data Sheet 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	8670-0-900	Revision Date:	06/03/2019
	Product Name:	CARBOXANE 2000 TOPCOAT / CARBOXANE 2000 TOPCOAT CARBO-KIT PART B	Supercedes Date:	04/05/2018
			Version Number:	10
1.2	Relevant identified uses of the substance or mixture and uses advised against	Hardener for 2 components coatings - Technical Data Sheet.	Industrial use. Advised against: Ple	ease see
	Product to be mixed with: Mixing ratio by volume Part A/ Part B:	CARBOXANE 2000 TOPCOAT / CAR 2:1	BOXANE 2000 TOPCOAT CARBO-	KIT PART A
1.3	Details of the supplier of the safety	data sheet		
	Importer:	None		
	Manufacturer:	Carboline Norge AS Postboks 593 3412 Lierstranda Norway Regulatory / Technical Information: +47 32 85 73 00 +47 32 85 74 00		
	Datasheet Produced by:	Larsen, Beate - ehs@stoncor.com		
1.4	Emergency telephone number:	CHEMTREC +1 703 5273887 (Outsid	e US)	

## **SECTION 2: Hazard Identification**

#### 2.1 Classification of the substance or mixture

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

## HAZARD STATEMENTS

Flammable Liquid, category 3	H226
Skin Corrosion, category 1B	H314-1B
Skin Sensitizer, category 1	H317
Acute Toxicity, Inhalation, category 4	H332
STOT, single exposure, category 3, RTI	H335
STOT, repeated exposure, category 2	H373

## 2.2 Label elements

### Symbol(s) of Product



## Signal Word

Danger

### Named Chemicals on Label

Methyl methacrylate, ethylbenzene, n-butyl acrylate, 3-aminopropyltriethoxysilane, xylene

## HAZARD STATEMENTS

Flammable Liquid, category 3 Skin Corrosion, category 1B Skin Sensitizer, category 1 Acute Toxicity, Inhalation, category 4 STOT, single exposure, category 3, RTI STOT, repeated exposure, category 2 PRECAUTION PHRASES	H226 H314-1B H317 H332 H335 H373	Flammable liquid and vapour. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure.
	5000	
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/ face protection.
	P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
	P333+313 P403+233	If skin irritation or rash occurs: Get medical advice/attention. Store in a well-ventilated place. Keep container tightly closed.

# 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.

## **SECTION 3: Composition/Information On Ingredients**

## 3.2 Mixtures

## Hazardous Ingredients

<u>CAS-No.</u>	<u>EINEC No.</u>	Name According to EEC	<u>%</u>
1330-20-7	215-535-7	xylene	10 - <25
919-30-2	213-048-4	3-aminopropyltriethoxysilane	10 - <25
100-41-4	202-849-4	ethylbenzene	2.5 - <10
107-98-2	203-539-1	1-methoxypropan-2-ol	2.5 - <10
141-32-2	205-480-7	n-butyl acrylate	0.1 - <1.0
108-88-3	203-625-9	toluene	0.1 - <1.0
80-62-6	203-025-9 201-297-1	Methyl methacrylate	0.1 - <1.0

CAS-No.	REACH Reg No.	CLP Symbols	CLP Hazard Statements	M-Factors
1330-20-7	01-2119488216-32	GHS02-GHS07-GHS08	H226-304-312-315-319-332-335-373	
919-30-2	01-2119480479-24	GHS05-GHS07	H302-314-317	
100-41-4		GHS02-GHS07-GHS08	H225-304-315-319-332-373-412	
107-98-2	01-2119457435-35	GHS02-GHS07	H226-336	

141-32-2	01-2119453155-43	GHS02-GHS07
108-88-3	01-2119471310-51	GHS02-GHS07-GHS08
80-62-6	01-2119452498-28	GHS02-GHS07

H226-315-317-319-332-335-412 H225-304-315-336-361d-373-412 H225-315-317-335

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. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. 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. Consult a physician.

**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

Harmful by inhalation. Causes burns. Irritating to respiratory system. May cause sensitization by skin contact. Danger of serious damage to health by prolonged exposure. Vapours may cause drowsiness and dizziness. Causes serious eye damage.

#### 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: Fire-fighting Measures**

### 5.1 Extinguishing Media:

#### Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: 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. 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

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. 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 noncombustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Clean with detergents. Avoid solvents.

### 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

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. Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Open drum carefully as content may be under pressure. 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).

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 away from: oxidising materials, acids, and alkalis. 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)

Name	CAS-No.	LTEL	opm <u>STEL ppm</u>	<u>STEL mg/m</u>	n <u>3 LTEL mg/m3</u>
xylene	1330-20-7	50	100	442	221
3-aminopropyltriethoxysilane	919-30-2				
ethylbenzene	100-41-4	100	200	884	442
1-methoxypropan-2-ol	107-98-2	100	150	568	375
n-butyl acrylate	141-32-2	2	10	53	11
toluene	108-88-3	50	100	384	192
Methyl methacrylate	80-62-6			100	50
Name	CAS-No.	OEL Note			
xylene	1330-20-7	Sk			
3-aminopropyltriethoxysilane	919-30-2				
ethylbenzene	100-41-4	Sk			
1-methoxypropan-2-ol	107-98-2	Sk			
n-butyl acrylate	141-32-2				
toluene	108-88-3	Sk			
Methyl methacrylate	80-62-6				

**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.

### 8.2 Exposure controls

#### Personal Protection RESPIRATORY PROTECTION: Use compressed air or fresh air breathing apparatus in closed compartments. Wear

respiratory protection with combination filter (dust and gas filter, EN 14387:2004+A1:2008) during spraying operations: 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.

### Chemical Name:

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

## DNELs - Derived no effect level

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

3-aminopropyltriethoxysilane	
EC No.:	CAS-No.:
213-048-4	919-30-2

### **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						
Inhalation		59 mg/m3		59 mg/m3				
Dermal		8.3 mg/Kg bw/	/	8.3 mg/Kg bw/				
		day		day				

## PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.33 mg/l
Fresh water sediments	
Marine water	0.033 mg/l
Marine sediments	
Food chain	
Microorganisms in sewage treatment	13 mg/l
soil (agricultural)	0.04 mg/kg
Air	

## Chemical Name: 1-methoxypropan-2-ol EC No.: 203-539-1

## 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						3.3 mg/kg	
Inhalation	553.5 mg/m3	553.5 mg/m <sup>3</sup>		369 mg/m3				43.9 mg/m3
Dermal				183 mg/kg bw/				18.1 mg/kg
				day				

CAS-No.:

107-98-2

## PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	10 mg/l
Fresh water sediments	100 mg/l
Marine water	1 mg/l
Marine sediments	5.2 mg/kg
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	5.49 mg/kg
Air	

## Chemical Name:

toluene	
EC No.:	CAS-No.:
203-625-9	108-88-3

## DNELs - Derived no effect level

	Workers			Consumers				
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required				· ·	·	8.13 mg/kg bw/ day	
Inhalation Dermal	384 mg/m3	384 mg/m3	192 mg/m3	192 mg/m3 384 mg/Kg bw/ day	226 mg/m3	226 mg/m3	56.5 mg/m3	56.5 mg/m3 226 mg/Kg bw/ day

## PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.68 mg/l
Fresh water sediments	16.39 mg/kg
Marine water	0.68 mg/l
Marine sediments	16.39 mg/kg
Food chain	
Microorganisms in sewage treatment	13.61 mg/l
soil (agricultural)	2.89 mg/kg
Air	

## **SECTION 9: Physical and Chemical Properties**

### 9.1 Information on basic physical and chemical properties Appearance: Colourless

, ppodianco.	Colouness
Physical State	Liquid
Odor	Solvent
Odor threshold	Not determined
рН	Not determined
Melting point / freezing point (°C)	Not determined

	Boiling point/range (°C)	100 - 144
	Flash Point, (°C)	24
	Evaporation rate	Not determined
	Flammability (solid, gas)	Not determined
	Upper/lower flammability or explosive limits	1 - 8
	Vapour Pressure	Not determined
	Vapour density	>1 (air = 1)
	Relative density	0.95 - 1.05
	Solubility in / Miscibility with water	Negligible
	Partition coefficient: n-octanol/water	Not determined
	Auto-ignition temperature (°C)	500
	Decomposition temperature (°C)	Not determined
	Viscosity	90 - 110 KU
	Explosive properties	Not determined
	Oxidising properties	Not determined
9.2	Other information	
	VOC Content g/I:	220
	Grams of VOC per liter of coating product as	applied per ISO 11890-1 and/or ISO 11890-2.
	Specific Gravity (g/cm3)	0.97

# **SECTION 10: Stability and Reactivity**

#### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

#### 10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions No Information

### 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 toxicological effects

Acute Toxicity:	
Oral LD50:	No information available on the product itself as the product is not tested.
Inhalation LC50:	No information available on the product itself as the product is not tested.
Irritation:	No information available.
Corrosivity:	Corrosive to eyes and skin.

Sensitization:	May cause an allergic skin reaction.
Repeated dose toxicity:	No information available.
Carcinogenicity:	No information available.
Mutagenicity:	No information available.
Toxicity for reproduction:	No information available.
STOT-single exposure:	Vapour/spray mist may irritate respiratory system and lungs.
STOT-repeated exposure:	Central nervous system depression.
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
1330-20-7	xylene	>2000 mg/kg (oral-rat)	1100 mg/kg (ATE dermal-rabbit)	11 mg/L (ATE inh/ vapour)	4500 ppmV (ATE inh -Gas)	1.5 mg/L (ATE inh/dust/mist)
919-30-2	3-aminopropyltriethoxysilane	1570 mg/kg (oral- rat)	4290 mg/kg (dermal-rabbit)	No information	No information	No information
100-41-4	ethylbenzene	3500 mg/kg rat, oral	5510 mg/kg, rabbit	4000 ppm, rat, 4h	10000 ppm	1.5 mg/L
107-98-2	1-methoxypropan-2-ol	4016 mg/kg (oral- rat)	>13000 mg/kg (dermal-rabbit)	10000 ppm/4hrs rat, inhalation	No information	No information
141-32-2	n-butyl acrylate	3143 mg/kg (Oral-rabbit)	>2000 mg/Kg (Dermal, rabbit,2000-3024 mg/kg)	10.3 mg/L (inhalation vapor, rat, 4h)	No information	No information
108-88-3	toluene	5000 mg/kg (oral- rat)	14000 mg/kg (dermal-rabbit)	8000 ppm/4hrs, rat, inhalation	No information	No information
80-62-6	Methyl methacrylate	7872 mg/kg (oral, rat)	>5000 mg/kg	3750 ppm (inhalation, rat)	No information	No information

## 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. Corrosive - causes irreversible eye damage. Chronic exposure has been associated with various neurotoxic effects including permanent brain damage. Chronic exposure causes drying effect on the skin and eczema. Inhalation of vapour or mist can cause headache, nausea, irritation of nose, throat, and lungs. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Corrosive to skin.

## SECTION 12: Ecological Information

## 12.1 Toxicity:

	EC50 48hr (Daphnia):	No information
	IC50 72hr (Algae):	No information
	LC50 96hr (fish):	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 assessment:	The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

### 12.6 Other adverse effects:

No information

CAS-No.	Name According to EEC	<u>EC50 48hr</u>	<u>IC50 72hr</u>	LC50 96hr
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)
919-30-2	3-aminopropyltriethoxysilane	No information	>1000 mg/l (EC50,72h, Desmodesmus Subspicatus)	934 mg/l (CL50 96h, Brachydanio rerio)
100-41-4	ethylbenzene	1.37 mg/l	No information	32 mg/l (Bluegill)
107-98-2	1-methoxypropan-2-ol	>21000 mg/L (Daphnia)	No information	6812 mg/L (Leuciscus idus)
141-32-2	n-butyl acrylate	8.2 mg/L (Daphnia magna)	2.65 mg/L; 5.9 mg/L (Pseudokirchneriella subcapitata)	2.1 mg/L (Cyprinus carpio); 5.2 mg/L (Oncorhyncus mykiss)
108-88-3	toluene	No information	No information	5.5 mg/L (Oncorhynchus kisutch)
80-62-6	Methyl methacrylate	720 mg/L	No information	125.5 - 275.0 mg/L

# **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:	08 01 11*
Packaging Waste Code:	15 01 10

SE	CTION 14: Transport Information	
14.1	UN number	UN3469
14.2	UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE
	Technical name	Not applicable
14.3	Transport hazard class(es)	3
	Subsidiary shipping hazard	8
14.4	Packing group	III
14.5	Environmental hazards	Marine pollutant: No
14.6	Special precautions for user	Not applicable
	EmS-No.:	F-E, S-C
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not applicable

## **SECTION 15: Regulatory Information**

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

National Regulations:	
Denmark Product Registration Number:	Not available
Danish MAL Code:	3 - 5
Danish MAL Code - Mixture:	2 - 6
Sweden Product Registration Number:	Not available

Norway Product Registration Number:	P-92430
Germany WGK Class:	3
Covered by Directive 2012/18/EC (Seveso III):	P5c
Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:	Entry 48
Annex XIV - Authorisation List:	

CAS-No. Name According to EEC

Not Applicable

SVHC - Substances of very high concern (Candidate List):

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:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
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.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

#### Reasons for revision

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 11 of the Safety Data Sheet (SDS). Please refer to the Toxicological Information in Section 11 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.

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
mqq	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 Pr	cotocol 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.