

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 0065800P Revision Date: 23/10/2020

Product Name: CARBOZINC 658 P - B Supersedes Date: 07/06/2019

Version Number: 3

1.2 Relevant identified uses of the substance or mixture and uses

advised against

Hardener for 2 components coatings - Industrial use. Advised against: Please see

Technical Data Sheet.

Product to be mixed with: Mixing ratio by volume Part A/

Part B:

CARBOZINC 658 P - A 23,25 / 1,75 by weight

1.3 Details of the supplier of the safety data sheet

Manufacturer: Carboline Italia, S.p.a.

Via Margherita Vigano' De Vizzi . n 77

20092 Cinisello Balsamo (MI)

Italy

Regulatory / Technical Information: +32 67493710 Nivelles, Belgium +39 02253751 Cinisello Balsamo, Italy

Datasheet Produced by: Chen, Shi - ehs@stoncor.com

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

PPC +1 412 6816669 (Outside US)

Centro Antiveleni di Milano Tel+39 02 66101029 CAV

Ospedale di Niguarda - Milano(24h/24h)

Emergenza ambientale +39 335-601 32 88 / +39

347-949 84 88 / +39 348-246 90 99

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 2 Skin Irritation, category 2 H225 H315

Skin Sensitizer, category 1	H317
Serious Eye Damage, category 1	H318
Acute Toxicity, Inhalation, category 4	H332
STOT, single exposure, category 3, RTI	H335
STOT, repeated exposure, category 2	H373
Hazardous to the aquatic environment, Chronic, category 2	H411

H225

2.2 Label elements

Symbol(s) of Product











Signal Word

Danger

Named Chemicals on Label

ethylbenzene, xylene, Amines, polyethylenepoly-, triethylenetetramine fraction, Fatty acids, C18-unsatd., dimers, oligomeric reaction products with triethylenetetramine

Highly flammable liquid and vapour.

HAZARD STATEMENTS

Flammable Liquid, category 2

Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Serious Eye Damage, category 1	H318	Causes serious eye damage.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
STOT, repeated exposure, category 2	H373	May cause 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+352	IF ON SKIN: Wash with plenty of soap and water.
	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+235	If skin irritation or rash occurs: Get medical advice/attention. Store in a well-ventilated place. Keep cool.

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

CAS-No.	EINEC No.	Name According to EEC	<u>%</u>
103758-99-2	500-290-3	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with triethylenetetramine	50 - <75
1330-20-7	215-535-7	xylene	10 - <25
67-63-0	200-661-7	Propan-2-ol	2.5 - <10
100-41-4	202-849-4	ethylbenzene	2.5 - <10
90-72-2	202-013-9	2,4,6-tris(dimethylaminomethyl)phenol	2.5 - <10
90640-67-8	292-588-2	Amines, polyethylenepoly-, triethylenetetramine fraction	1.0 - <2.5

CAS-No.	REACH Reg No.	CLP Symbols	CLP Hazard Statements	M-Factors
103758-99-2	01-2119978243-32	GHS05-GHS07-GHS09	H315-317-318-411	
1330-20-7	01-2119488216-32	GHS02-GHS07-GHS08	H226-304-312-315-319-332-335-373	
67-63-0	01-2119457558-25	GHS02-GHS07	H225-319-336	
100-41-4	01-2119489370-35	GHS02-GHS07-GHS08	H225-304-332-373-412	
90-72-2	01-2119560597-27	GHS07	H302-315-319	
90640-67-8	01-2119487919-13	GHS05-GHS07	H302-312-314-317-412	

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: Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

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. May cause sensitization by skin contact. Danger of serious damage to health by prolonged exposure. Irritating to respiratory system and skin. 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: 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

Fire will produce dense black smoke containing hazardous combustion products (see section 10). 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 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). 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

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). 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. Provide sufficient air exchange and/or exhaust in work rooms. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. 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.

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. Storage of flammable liquids.

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
Fatty acids, C18-unsatd., dimers, oligome reaction products with triethylenetetramine					
xylene	1330-20-7	50	100	442	221
Propan-2-ol	67-63-0				

ethylbenzene 100-41-4 100 200 884 442 2,4,6-tris(dimethylaminomethyl)phenol 90-72-2 Amines, polyethylenepoly-, triethylenetetramine fraction

<u>Name</u>	CAS-No.	OEL Note
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with triethylenetetramine	103758-99-2	
xylene	1330-20-7	
Propan-2-ol	67-63-0	
ethylbenzene	100-41-4	
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	
Amines, polyethylenepoly-, triethylenetetramine fraction	90640-67-8	

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:

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with triethylenetetramine

EC No.: CAS-No.: 500-290-3 103758-99-2

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							560 μg/kg bw/	
Inhalation				3.9 mg/m³				day 970 μg/m³	
Dermal				1.1 mg/kg bw/ day				560 μg/kg bw/ day	

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	4.34 μg/L
Fresh water sediments	434.02 mg/kg sediment dw
Marine water	434 ng/L
Marine sediments	43.4 mg/kg sediment dw
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	86.78 mg/kg soil dw
Air	

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	oral Not required			•		<u> </u>	<u>'</u>	1.6 mg/kg bw/ day	
Inhalation	289 mg/m³	289 mg/m³		77 mg/m³	174 mg/m³	174 mg/m³		14.8 mg/m³	
Dermal				180 mg/kg bw/ day				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:

Propan-2-ol

EC No.: CAS-No.: 200-661-7 67-63-0

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							26 mg/kg bw/day	
Inhalation	500			500 mg/m3				89 mg/m3	
Dermal				888 mg/kg bw/				319 mg/kg bw/	
	_			day				day	

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	140.9 mg/l
Fresh water sediments	552 mg/kg
Marine water	140.9 mg/l
Marine sediments	552 mg/kg
Food chain	
Microorganisms in sewage treatment	2251 mg/L
soil (agricultural)	28 mg/kg
Air	

Chemical Name:

ethylbenzene

EC No.: CAS-No.: 202-849-4 100-41-4

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	293 mg/m³ irritation (respiratory tract)			77 mg/m³				15 mg/m³
Dermal				180 mg/kg bw/ day				

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC	
Fresh water	100 μg/L	
Fresh water sediments	13.7 mg/kg sediment dw	
Marine water	10 - 100 μg/L	
Marine sediments	1.37 mg/kg sediment dw	
Food chain		
Microorganisms in sewage treatment		
soil (agricultural)	2.68 mg/kg soil dw	
Air		

Chemical Name:

2,4,6-tris(dimethylaminomethyl)phenol

EC No.: CAS-No.: 202-013-9 90-72-2

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		0.52 mg/m3	4.9 mg/m3	0.31 mg/m3				
Dermal		0.6 mg/kg bw/		0.15 mg/kg bw/				
	_	day		day				

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.084 mg/L
Fresh water sediments	
Marine water	0.0084 mg/L
Marine sediments	
Food chain	
Microorganisms in sewage treatment	0.2 mg/L
soil (agricultural)	
Air	

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Brown
Physical State LIQUID

Odor Solvent

Odor threshold Not determined

pH Not determined

Melting point / freezing point (°C) Not determined

Boiling point/range (°C) 82 - 152

Flash Point, (°C)

Evaporation rate Not determined

Flammability (solid, gas) Not determined

Upper/lower flammability or explosive

limits

1.0 - 12.0

Vapour Pressure Not determined

Vapour density >1 (air = 1)

Relative density 0.93

Solubility in / Miscibility with water Negligible

Partition coefficient: n-octanol/water Not determined

Auto-ignition temperature (°C) >425

Decomposition temperature (°C) Not determined

Viscosity Not determined

Explosive properties Not determined

Oxidising properties Not determined

9.2 Other information

VOC Content g/l: 500.00

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

Specific Gravity (g/cm3) 0.93

SECTION 10: Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under recommended storage and use conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No reactivity hazards known under recommended 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 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: Causes serious eye damage.

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
103758-99-2	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with triethylenetetramine	>2000 mg/kg bw (rat)	>2000 mg/kg bw (dermal-rat)	No information	No information	No information
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)
67-63-0	Propan-2-ol	5840 mg/kg (oral, rat)	13900 mg/kg (dermal, rabbit)	>25 mg/L (inhalation, vapor, rat)	No information	No information
100-41-4	ethylbenzene	3500 mg/kg rat, oral	>20000 mg/kg bw (rabbit)	17.2 mg/L (rat/4h/ vapour); 4000 ppm, rat, 4h	10000 ppm	1.5 mg/L
90-72-2	2,4,6-tris (dimethylaminomethyl)phenol	2169 mg/kg (oral, rat)	2110 mg/kg (dermal, rabbit)	No information	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. Gas or vapour is harmful on prolonged exposure or in high concentrations. Irritant of eyes and mucous membranes. CNS depressant. Inhalation is the main hazard in industrial use. The solvent vapours can be harmful and cause headaches, nausea, and intoxication. Acts as a defatting agent on skin.

SECTION 12: Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

LC50 96hr (fish):

No information

12.5 Results of PBT and vPvB The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII. assessment:

12.6 Other adverse effects: No information

CAS-No. Name According to EEC EC50

100-41-4 ethylbenzene No information No information 5.1 mg/L (Atlantic silverfish)

90-72-2 2,4,6-tris(dimethylaminomethyl)phenol 718 mg/L (EC50, 96h, Palaeomonetes vulgaris) 84 mg/L (EC50, 72h, Desmodesmus subspicatus) 175 mg/L (LC50, 96h, Cyprinus carpio)

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*

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)

Subsidiary shipping hazard Not applicable

14.4 Packing group

14.5 Environmental hazards MARINE POLLUTANT: YES (Fatty acids, C18-unsatd.,dimers,

oligomeric reaction prod. with triethylenetetramine)

14.6 Special precautions for user Not applicable EmS-No.: F-E, S-E

T-L, <u>o</u>

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

Norway Product Registration Number: Not available

Germany WGK Class: 2

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

Covered by Directive 2012/18/EC (Seveso III): P5c, E2

Restrictions to product or to substances according

to Annex XVII, Regulation (CE) 1907/2006: Entry 3, 40

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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

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.