



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

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

<b>1.1 Product Identifier</b>	8733-0910	<b>Revision Date:</b>	09/12/2022
<b>Product Name:</b>	TYNNER NR. 33 / THINNER NO. 33	<b>Supersedes Date:</b>	19/01/2022
		<b>Version Number:</b>	2
<b>UFI Code:</b>	1UM0-700T-R00C-NFWC		
<b>Nano Form:</b>	No		
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	Thinner for industrial coatings - Industrial use. Advised against: others than recommended		
<b>Product to be mixed with:</b>	Not applicable		
<b>Mixing ratio by volume Part A/ Part B:</b>	Not applicable		
<b>1.3 Details of the supplier of the safety data sheet</b>			
<b>Importer:</b>	None		
<b>Manufacturer:</b>	Carboline Norge AS Postboks 593 3412 Lierstranda Norway		
	Regulatory / Technical Information: +47 32 85 73 00 +47 32 85 74 00		
<b>Datasheet Produced by:</b>	Tarka, Malgorzata - hms@carboline.com		
<b>1.4 Emergency telephone number:</b>	CHEMTREC +1 703 5273887 (Outside US)		

## SECTION 2: Hazards 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
Aspiration Hazard, category 1	H304
Skin Irritation, category 2	H315

Eye Irritation, category 2	H319
Acute Toxicity, Inhalation, category 4	H332
STOT, single exposure, category 3, RTI	H335
STOT, single exposure, category 3, NE	H336
Hazardous to the aquatic environment, Chronic, category 3	H412

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Danger

### Named Chemicals on Label

1-methoxypropan-2-ol, 2-butoxyethanol, hydrocarbons, c9, aromatics

#### HAZARD STATEMENTS

Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Aspiration Hazard, category 1	H304	May be fatal if swallowed and enters airways.
Skin Irritation, category 2	H315	Causes skin irritation.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

#### PRECAUTION PHRASES

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P331	Do NOT induce vomiting.
P403+235	Store in a well-ventilated place. Keep cool.

## 2.3 Other hazards

Vapours may form explosive mixtures with air. Solvent vapours are heavier than air and may spread along floors and ignite.

### 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

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

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 EINECS No. CAS-No. REACH Reg No.	%	Classifications	SCL Value ATE Value M-Factor
1-methoxypropan-2-ol 203-539-1 107-98-2 01-2119457435-35	50 - <75	H226-336 Flam. Liq. 3, STOT SE 3 NE	SCL: - ATE: - M-Factor: -
2-butoxyethanol 203-905-0 111-76-2 01-2119475108-36	10 - <25	H302-312-315-319-332 Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Eye Irrit. 2, Skin Irrit. 2	SCL: - ATE: - M-Factor: -
hydrocarbons, c9, aromatics 918-668-5 64742-95-6 01-2119455851-35	10 - <25	H226-304-335-336-411 Aquatic Chronic 2, Asp. Tox. 1, Flam. Liq. 3, Skin Cracking, STOT SE 3 NE, STOT SE 3 RTI	SCL: - ATE: - M-Factor: -
2-methoxypropanol 216-455-5 1589-47-5 -	0.1 - <1.0	H226-315-318-335-360 Eye Dam. 1, Flam. Liq. 3, Repr. 1B, Skin Irrit. 2, STOT SE 3 RTI	SCL: - ATE: - M-Factor: -

#### 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. Give oxygen or artificial respiration if needed. When risk of unconsciousness, place and transport the victim in secured recovery position. Provide fresh air, rest and warmth. Call a physician immediately.

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

#### 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. Danger of serious damage to health by prolonged exposure. Irritating to eyes, respiratory system and skin. Vapours may cause drowsiness and dizziness.

### 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). May explode in fire. 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.

#### 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. Inform the responsible authorities in case of gas leakage, or of entry into waterways, soil or 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). After cleaning, flush away traces with water.

#### 6.4 Reference to other sections

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

Keep containers dry and tightly closed to avoid moisture absorption and contamination. 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. Do not breathe vapours or spray mist. Use only explosion-proof equipment.

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 moisture. 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. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Keep away from heat and flame. Keep away from combustible materials. Store in upright position only. Storage of flammable liquids. Store away from: oxidising materials, acids, and alkalis.

### 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>	<u>CAS-No.</u>	<u>LTEL ppm</u>	<u>STEL ppm</u>	<u>STEL mg/m3</u>	<u>LTEL mg/m3</u>
1-methoxypropan-2-ol	107-98-2	100	150	560	375
2-butoxyethanol	111-76-2	25	50	246	123
hydrocarbons, c9, aromatics	64742-95-6				551
2-methoxypropanol	1589-47-5				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
1-methoxypropan-2-ol	107-98-2	Sk
2-butoxyethanol	111-76-2	Sk
hydrocarbons, c9, aromatics	64742-95-6	
2-methoxypropanol	1589-47-5	

**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:**

1-methoxypropan-2-ol

**EC No.:**

203-539-1

**CAS-No.:**

107-98-2

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	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						3.3 mg/kg	43.9 mg/m3
Inhalation	553.5 mg/m3	553.5 mg/m <sup>3</sup>		369 mg/m3				18.1 mg/kg
Dermal				50.6 mg/kg bw/day				

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	10 mg/L
Fresh water sediments	52.3 mg/kg
Marine water	1 mg/L
Marine sediments	5.2 mg/kg
Food chain	
Microorganisms in sewage treatment	100 mg/L
soil (agricultural)	5.49 mg/kg
Air	

**Chemical Name:**

2-butoxyethanol

**EC No.:**

203-905-0

**CAS-No.:**

111-76-2

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	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				123 mg/m3	13.4 mg/kg		3.2 mg/kg
Inhalation	50 ppm	135 ppm		20 ppm		426 mg/m3		49 mg/m3
Dermal		89 mg/kg		75 mg/kg		44.5 mg/kg		38 mg/kg

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	8.8 mg/L
Fresh water sediments	34.6 mg/kg
Marine water	0.88 mg/L
Marine sediments	3.46 mg/kg
Food chain	
Microorganisms in sewage treatment	463 mg/L
soil (agricultural)	2.8 mg/kg
Air	

**8.2 Exposure controls****Personal Protection**

**RESPIRATORY PROTECTION:** When working in confined or poorly ventilated spaces, a battery powered assisted air-fed mask must be used. Respirator with a vapour filter: gas filter type A2 (organic substances).

**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: Nitrile rubber. Viton®.

**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**

<b>Colour</b>	Colourless
<b>Physical State</b>	Liquid
<b>Odor</b>	Solvent
<b>Odor threshold</b>	Not determined
<b>pH</b>	7.0 - 8.0
<b>Melting point / freezing point (°C)</b>	Not determined
<b>Boiling point or initial boiling point and boiling range (°C)</b>	120 - 200
<b>Flash Point, (°C)</b>	31
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not determined
<b>Lower and upper explosive limit</b>	0.7 - 13.7
<b>Vapour Pressure</b>	Not determined
<b>Relative vapour density</b>	>1 (air = 1)
<b>Density and/or relative density</b>	0.88 - 0.92
<b>Solubility in / Miscibility with water</b>	Negligible
<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Auto-ignition temperature (°C)</b>	224
<b>Decomposition temperature (°C)</b>	Not determined
<b>Kinematic viscosity</b>	Not determined
<b>Particle characteristics</b>	Not applicable to liquids

**9.2 Other information**

**VOC Content g/l:** 905

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

**Specific Gravity (g/cm<sup>3</sup>)** 0.91

## 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**

Hazardous polymerisation does not occur. No reactivity hazards known under normal storage and use conditions.

**10.4 Conditions to avoid**

Avoid moisture. Avoid heat, sparks, flames and other ignition sources.

**10.5 Incompatible materials**

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

**10.6 Hazardous decomposition products**

Carbon dioxide, carbon monoxide.

## SECTION 11: Toxicological information

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****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.
- Dermal LD50:** No information available on the product itself as the product is not tested.

**Irritation:** Irritating to eyes and skin.

**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:** Vapour/spray mist may irritate respiratory system and lungs.

**STOT-repeated exposure:** Central nervous system depression.

**Aspiration hazard:** Swallowing concentrated chemical may cause severe internal injury

**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:**

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
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
111-76-2	2-butoxyethanol	1746 mg/kg (oral-rat)	>2000 mg/kg (dermal, rabbit)	>10-20 mg/ L/4h (inhalation, rat)	No information	No information
64742-95-6	hydrocarbons, c9, aromatics	3492 mg/kg (oral-rat)	>3160 mg/kg (dermal-rabbit)	>6193 mg/L (inh-rat- vapour,4h)	No information	No information
1589-47-5	2-methoxypropanol	5710 mg/kg, oral, rat	No information	No information	No information	No information

**Additional Information:**

Repeated and prolonged exposure to solvents may cause brain and nervous system damage. Chronic exposure causes drying effect on the skin and eczema. 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. Chronic exposure has been associated with various neurotoxic effects including permanent brain damage. 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**

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):	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 Endocrine disrupting properties

#### Endocrine disrupting properties - Ecotoxicity

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

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
107-98-2	1-methoxypropan-2-ol	>21000 mg/L (Daphnia magna)	No information	6812 mg/L (Leuciscus idus)
111-76-2	2-butoxyethanol	1550 mg/L (Daphnia magna)	1840 mg/L (Pseudokirchneriella subcapitata, ErC50, 72h)	1474 mg/L (Oncorhynchus mykiss)
64742-95-6	hydrocarbons, c9, aromatics	3.2 mg/L (Daphnia magna)	No information	9.2 mg/L (Oncorhynchus mykiss)

## 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. Rags/wiping cloths and the like, moistened with flammable liquids, must be discarded into designated fireproof buckets. 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**

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN-number</b>	UN1263	UN1263	UN1263	UN1263
<b>14.2 UN proper shipping name</b>	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
<b>14.3 Transport Hazard Class(es)</b>	3	3	3	3
<b>14.4 Packing Group</b>	III	III	III	III
<b>14.5 Enviromental Hazards</b>	Marine pollutant: No	Marine pollutant: No	Marine pollutant: No	Marine pollutant: No

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

**14.7 Maritime transport in bulk according to IMO instruments** 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:** 4 - 3

**Danish MAL Code - Mixture:** 4 - 3

**Sweden Product Registration Number:** Not available

**Norway Product Registration Number:** P-30244

**WGK Class:** 1

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

**Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:** Entry 3, 40

**Annex XIV - 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.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
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.
H360	May damage fertility or the unborn child.
H411	Toxic 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
- Joint Research Centre in Ispra, Italy
- Regulation (EC) 1272/2008 with subsequent amendments
- Regulation (EC) 1907/2006 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 of the product is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the exact 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/m <sup>3</sup>	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
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 $\leq 10 \mu\text{m}$ .

For further information, please contact: Regulatory 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.

