

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 20/08/2024 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture

: FTC-ZA ZINCALUSPRAY Trade name UFI JV60-N0YU-K006-RP1H

00509241 Article number Aerosol Vaporizer

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Relevant identified uses

Use of the substance/mixture : Lacquer Use of the substance/mixture Corrosion inhibitor

#### 1.3. Details of the supplier of the safety data sheet

Manufacturer

fischerwerke GmbH & Co. KG Klaus-Fischer-Straße 1 72178 Waldachtal Germany

T +49(0)7443 12-0, F +49(0)7443 12-4222 info-sdb@fischer.de, www.fischer.de

1.4. Emergency telephone number

Distributor

fischer fixings UK Ltd. Whitely Road

Oxon OX10 9AT Wallingford

United Kingdom of Great Britain and Northern Ireland T +44 14 91 82 79 00, F +44 14 91 82 79 53 info@fischer.co.uk, www.fischer.co.uk

Emergency number : +49(0)6132-84463 (24h)

#### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aerosol 1 H222·H229 Skin Irrit. 2 H315 Eve Irrit. 2 H319 STOT SE 3 H336 STOT RE 2 H373 Asp. Tox. 1 H304 H411 Aquatic Chronic 2 Full text of hazard classes, H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)









GHS02

GHS07

Signal word (CLP) : Danger

Contains : acetone; propan-2-one; propanone;xylene;Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-

> hexane; Hydrocarbons, C9, aromatics H222 - Extremely flammable aerosol.

Hazard statements (CLP) H229 - Pressurised container: May burst if heated

> H315 - Causes skin irritation. H319 - Causes serious eye 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.

Precautionary statements (CLP) P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

P210 - Keep away from sparks, heat, hot surfaces, open flames. No smoking.

P211 - Do not spray on an open flame or other ignition source.

P251 - Do not pierce or burn, even after use.

P260 - Do not breathe vapours, spray.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P280 - Wear eye protection/face protection, protective gloves.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P391 - Collect spillage.

P405 - Store locked up.

P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P501 - Dispose of contents/container to a hazardous or special waste collection point.

#### 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component			
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Hydrocarbons, C9, aromatics		
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Hydrocarbons, C9, aromatics		

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

#### Component

Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Hydrocarbons, C9, aromatics

### **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures

N a m e	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
acetone; propan-2-one; propanone	CAS-No.: 67-64-1 EC-No.: 200-662-2 EC Index-No.: 606-001-00-8 REACH-no: 01-2119471330-49	≥ 20 - < 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
dimethyl ether	CAS-No.: 115-10-6 EC-No.: 204-065-8 EC Index-No.: 603-019-00-8 REACH-no: 01-2119472128-37	≥ 10 - < 20	Flam. Gas 1, H220 Press. Gas (Liq.), H280
xylene	CAS-No.: 1330-20-7 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9 REACH-no: 01-2119488216-32	≥ 10 - < 20	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304

20/08/2024 (Issue date) 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
propane	CAS-No.: 74-98-6 EC-No.: 200-827-9 EC Index-No.: 601-003-00-5 REACH-no: 01-2119486944-21	≥ 10 - < 20	Flam. Gas 1, H220 Press. Gas (Comp.), H280
isobutane	CAS-No.: 75-28-5 EC-No.: 200-857-2 EC Index-No.: 601-004-00-0 REACH-no: 01-2119485395-27	≥ 5 – < 10	Flam. Gas 1, H220 Press. Gas (Comp.), H280
butane	CAS-No.: 106-97-8 EC-No.: 203-448-7 EC Index-No.: 601-004-00-0 REACH-no: 01-2119752523-40	≥ 5 – < 10	Flam. Gas 1, H220 Press. Gas (Comp.), H280
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	EC-No.: 921-024-6 REACH-no: 01-2119475514-35	≥ 5 - < 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	CAS-No.: 64742-49-0 EC-No.: 927-510-4 REACH-no: 01-2119475515-33	≥ 5 - < 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hydrocarbons, C9, aromatics	EC-No.: 918-668-5	≥ 5 - < 10	Flam. Liq. 3, H226 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
aluminium powder (stabilised)	CAS-No.: 7429-90-5 EC-No.: 231-072-3 EC Index-No.: 013-002-00-1 REACH-no: 01-2119529243-45	≥ 2.5 – < 5	Not classified
ethylbenzene	CAS-No.: 100-41-4 EC-No.: 202-849-4 EC Index-No.: 601-023-00-4 REACH-no: 01-2119489370-35	≥ 1 - < 2.5	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) STOT RE 2, H373 Asp. Tox. 1, H304
zinc powder— zinc dust (stabilised)  Product subject to CLP Appey Litem 1.1.3.7. The disclete	CAS-No.: 7440-66-6 EC-No.: 231-175-3 EC Index-No.: 030-001-01-9 REACH-no: 01-2119467174-37	≥ 1 - < 2.5	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

Product subject to CLP Annex I, item 1.1.3.7. The disclosure rules of the components is modified in this case.

Full text of H- and EUH-statements: see section 16

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

First-aid measures general

First-aid measures after inhalation

First-aid measures after skin contact

First-aid measures after eye contact

First-aid measures after ingestion

- : Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
- : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
- : Wash skin with plenty of water and soap. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- : Wash out mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if

inhaled

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable aerosol.

Explosion hazard : Pressurised container: May burst if heated.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.

Complete protective clothing.

Other information : Do not allow water used to extinguish fire to enter drains, ground or waterways.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe Avoid breathing

dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

#### For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to

section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site

#### 6.4. Reference to other sections

For further information refer to section 13.

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not

spray on an open flame or other ignition source. Do not pierce or burn, even after use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or

in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in

a well-ventilated place. Keep container tightly closed. Keep cool.

20/08/2024 (Issue date) GB - en 4/17 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

# 7.3. Specific end use(s)

PU installation foams.

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

National occupational exposure and biological limit values

acetone; propan-2-one; propanon	e (67-64-1)
EU - Indicative Occupational Exposure Limit (IOEL)	)
Local name	Acetone
IOEL TWA	1210 mg/m³
	500 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom - Occupational Exposure Limits	
Local name	Acetone
WEL TWA (OEL TWA)	1210 mg/m³
	500 ppm
WEL STEL (OEL STEL)	3620 mg/m³
	1500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
dimethyl ether (115-10-6)	·
EU - Indicative Occupational Exposure Limit (IOEL)	)
Local name	Dimethylether
IOEL TWA	1920 mg/m³
	1000 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom - Occupational Exposure Limits	
Local name	Dimethyl ether
WEL TWA (OEL TWA)	766 mg/m³
	400 ppm
WEL STEL (OEL STEL)	958 mg/m³
	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
xylene (1330-20-7)	
EU - Indicative Occupational Exposure Limit (IOEL	)
Local name	Xylene, mixed isomers, pure
IOEL TWA	221 mg/m³
	50 ppm
IOEL STEL	442 mg/m³
	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom - Occupational Exposure Limits	
Local name	Xylene
WEL TWA (OEL TWA)	220 mg/m³ o-,m-,p- or mixed isomers

20/08/2024 (Issue date) 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

xylene (1330-20-7)				
	50 ppm o-,m-,p- or mixed isomers			
WEL STEL (OEL STEL)	441 mg/m³ o-,m-,p- or mixed isomers			
	100 ppm o-,m-,p- or mixed isomers			
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)			
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE			
United Kingdom - Biological limit values				
Local name	Xylene, o-, m-, p- or mixed isomers			
BMGV	650 mmol/mol Creatinine Parameter: methyl hippuric acid - Medium: urine - Sampling time: Post shift			
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE			
ethylbenzene (100-41-4)				
EU - Indicative Occupational Exposure Limit (IOEL)				
Local name	Ethylbenzene			
IOEL TWA	442 mg/m³			
	100 ppm			
IOEL STEL	884 mg/m³			
	200 ppm			
Remark	Skin			
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC			
United Kingdom - Occupational Exposure Limits				
Local name	Ethylbenzene			
WEL TWA (OEL TWA)	441 mg/m³			
	100 ppm			
WEL STEL (OEL STEL)	552 mg/m³			

Sk (Can be absorbed through the skin. The assigned substances are those for which there are

concerns that dermal absorption will lead to systemic toxicity)

EH40/2005 (Fourth edition, 2020). HSE

125 ppm

### 8.2. Exposure controls

Regulatory reference

### Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

# Personal protection equipment

#### Personal protective equipment symbol(s):



Remark





### Eye and face protection

Eye protection:

Safety glasses

#### Skin protection

Skin and body protection:

Wear suitable protective clothing

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### Hand protection:

Protective gloves

Hand protection					
Type Material Permeation Thickness (mm) Penetration Standard					
Disposable gloves	Butyl rubber	6 (> 480 minutes)	> 0,7		EN 374-2, EN 374-3
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,7		EN 374-2, EN 374-3

#### Respiratory protection

#### Respiratory protection:

In the event of insufficient ventilation: Use self-contained breathing apparatus

Respiratory protection					
Device Filter type Condition Standard					
	Type A - High-boiling (>65 °C) organic compounds		EN 140		
	Filter AX (brown)		EN 14387		

#### **Environmental exposure controls**

#### Environmental exposure controls:

Avoid release to the environment.

# SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Physical state Colour : Silver. Odour : Not available Odour threshold Not available Melting point Not available Freezing point : Not available : Not available Boiling point Flammability Not available Lower explosion limit : Not available Upper explosion limit : Not available : Not applicable Flash point Auto-ignition temperature : > 200 °C Decomposition temperature : Not available : Not available рΗ Viscosity, kinematic < 20.5 mm<sup>2</sup>/s Solubility Not available Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure Not available Vapour pressure at 50°C Not available Density : 0.73485 g/cm<sup>3</sup> : Not available Relative density Relative vapour density at 20°C Not available Particle characteristics : Not applicable

### 9.2. Other information

### Information with regard to physical hazard classes

% of flammable ingredients : 137.5 %

### **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

# 10.2. Chemical stability

Stable under normal conditions.

20/08/2024 (Issue date) GB - en 7/17

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Acute toxicity (oral)

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Strong acids. Oxidizing agent. Strong bases. Water. alcohols. Amines.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: Not classified

# **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified : Not classified
acetone; propan-2-one; propan	one (67-64-1)
LD50 oral rat	5800 mg/kg bodyweight
LD50 dermal rabbit	> 7400 mg/kg
LC50 Inhalation - Rat	76 mg/l
LC50 Inhalation - Rat (Vapours)	76 mg/l
isobutane (75-28-5)	
LC50 Inhalation - Rat	1443 mg/l
dimethyl ether (115-10-6)	
LC50 Inhalation - Rat [ppm]	164000 ppm
xylene (1330-20-7)	
LD50 oral rat	4300 mg/kg
LD50 dermal rabbit	12126 mg/kg bodyweight
LC50 Inhalation - Rat [ppm]	5922 ppm
propane (74-98-6)	
LC50 Inhalation - Rat [ppm]	800000 ppm
ethylbenzene (100-41-4)	
LD50 oral rat	≈ 3500 mg/kg bodyweight
LD50 dermal rabbit	17.8 ml/kg
Hydrocarbons, C6-C7, n-alkane	s, isoalkanes, cyclics, <5% n-hexane

LD50 oral rat	> 5840 mg/kg
LD50 dermal rat	> 4 ml/kg

> 25.2 mg/l

Hydrocarbons, C7, n-alkanes, isoalka	anes, cyclics (64742-49-0)

LD50 oral rat	> 5840 mg/kg
LC50 Inhalation - Rat	> 23.3 mg/l (OECD 403 method)

				~ ~		
Н	yaro	carbo	ns,	C9,	arom	atics

LC50 Inhalation - Rat

LD50 oral rat	> 5000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 3160 mg/kg bodyweight (OECD 402 method)
LC50 Inhalation - Rat	> 6193 mg/l (OECD 403 method)

20/08/2024 (Issue date) GB - en 8/17 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

according to the REACH Regulation (EC) 1907/2006 aniended by Regulation (EO) 2020/676				
Hydrocarbons, C9, aromatics				
LC50 Inhalation - Rat (Vapours)	5.16 mg/l			
zinc powder— zinc dust (stabilised) (7440-66-6)				
LD50 oral rat	> 2000 mg/kg			
LC50 Inhalation - Rat	> 5.41 g/m³			
aluminium powder (stabilised) (7429-90-5)				
LD50 oral rat	> 15900 mg/kg bodyweight			
LC50 Inhalation - Rat	> 0.888 mg/l			
Skin corrosion/irritation :	Causes skin irritation.			
acetone; propan-2-one; propanone (67	-64-1)			
рН	5 Source: ECHA			
Serious eye damage/irritation :	Causes serious eye irritation.			
acetone; propan-2-one; propanone (67	-64-1)			
pH	5 Source: ECHA			
•	Not classified Not classified			
	Not classified			
xylene (1330-20-7)				
IARC group	3 - Not classifiable			
	Not classified			
STOT-single exposure : May cause drowsiness or dizziness.				
acetone; propan-2-one; propanone (67-64-1)				
STOT-single exposure May cause drowsiness or dizziness.				
xylene (1330-20-7)  STOT-single exposure  May cause respiratory irritation				
STOT-single exposure May cause respiratory irritation.				
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane				
STOT-single exposure	May cause drowsiness or dizziness.			
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)				
STOT-single exposure	May cause drowsiness or dizziness.			
Hydrocarbons, C9, aromatics				
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.			
STOT-repeated exposure :	May cause damage to organs through prolonged or repeated exposure.			
isobutane (75-28-5)				
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight			
xylene (1330-20-7)				
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight (OECD 408 method)			
STOT-repeated exposure	May cause damage to organs (respiratory system) through prolonged or repeated exposure.			
ethylbenzene (100-41-4)				
NOAEL (oral, rat, 90 days)	75 mg/kg bodyweight (OECD 407 method)			
STOT-repeated exposure	May cause damage to organs (hearing organs) through prolonged or repeated exposure.			
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)				
LOAEC (inhalation, rat, vapour, 90 days)	16.6 mg/l			
NOAEC (inhalation, rat, vapour, 90 days)	3.3 mg/l air			

20/08/2024 (Issue date) 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hydrocarbons, C9, aromatics					
NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)				
zinc powder— zinc dust (stabilised) (7440-66-6)					
LOAEL (oral, rat, 90 days)	53.8 mg/kg bodyweight				
NOAEL (oral, rat, 90 days)	31.52 mg/kg bodyweight				
aluminium powder (stabilised) (742	9-90-5)				
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.05 mg/l air				
NOAEL (subchronic, oral, animal/male, 90 days)	1034 mg/kg bodyweight				
NOAEL (subchronic, oral, animal/female, 90 days)	1087 mg/kg bodyweight				
Aspiration hazard	: May be fatal if swallowed and enters airways.				
FTC-ZA ZINCALUSPRAY					
Vaporizer	Aerosol				
Viscosity, kinematic	< 20.5 mm²/s				
isobutane (75-28-5)					
Viscosity, kinematic	0 mm²/s				
xylene (1330-20-7)					
Viscosity, kinematic	0.74 mm <sup>2</sup> /s				
Hydrocarbons, C6-C7, n-alkanes, is	oalkanes, cyclics, <5% n-hexane				
Viscosity, kinematic	0.7 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'				
Hydrocarbons, C7, n-alkanes, isoal	kanes, cyclics (64742-49-0)				
Viscosity, kinematic	0.67 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'				
Hydrocarbons, C9, aromatics					
Viscosity, kinematic	< 1 mm²/s Temp.: 'other:' Parameter: 'kinematic viscosity (in mm²/s)'				

#### 11.2. Information on other hazards

No additional information available

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

acetone; propan-2-one; propanone (67-64-1)			
LC50 - Fish [1]	5540 mg/l		
LOEC (chronic)	> 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
NOEC (chronic)	≥ 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
isobutane (75-28-5)			
LC50 - Fish [1]	312.69 mg/l Brachydanio rerio (zebra-fish)		
LC50 - Fish [2]	447000 mg/l		
EC50 - Crustacea [1]	7417 mg/l Daphnia magna (Water flea)		
EC50 72h - Algae [1]	3855891 mg/l Desmodesmus subspicatus		
EC50 96h - Algae [1]	25761.03 mg/l		
dimethyl ether (115-10-6)			
LC50 - Fish [1]	> 4.1 g/l Poecilia reticulata (Guppy)		
EC50 - Crustacea [1]	> 4.4 g/l Daphnia magna (Water flea)		

20/08/2024 (Issue date) GB - en 10/17 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878					
dimethyl ether (115-10-6)					
EC50 96h - Algae [1]	154917 mg/l				
xylene (1330-20-7)					
LC50 - Fish [1]	2.6 mg/l				
EC50 - Crustacea [1]	> 3.4 mg/l Ceriodaphnia dubia				
EC50 72h - Algae [1]	2.2 mg/l Selenastrum capricornutum (OECD 201 method)				
LOEC (chronic)	3.16 mg/l Daphnia magna (Water flea)				
NOEC chronic fish	≈ 1.3 mg/l Oncorhynchus mykiss (Rainbow trout)				
NOEC chronic crustacea	0.96 mg/l Daphnia magna (Water flea)				
NOEC chronic algae	0.44 mg/l Pseudokirchneriella subcapitata				
propane (74-98-6)					
LC50 - Fish [1]	> 100 mg/l				
ethylbenzene (100-41-4)					
LC50 - Fish [1]	5.1 mg/l				
EC50 - Crustacea [1]	1.8 mg/l Daphnia magna (Water flea)				
EC50 72h - Algae [1]	5.4 mg/l Pseudokirchneriella subcapitata				
EC50 72h - Algae [2]	4.9 mg/l Skeletonema costatum (marine diatom)				
EC50 96h - Algae [1]	3.6 mg/l Pseudokirchneriella subcapitata				
EC50 96h - Algae [2]	7.7 mg/l Skeletonema costatum (marine diatom)				
LOEC (chronic)	1.7 mg/l Ceriodaphnia dubia				
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane					
LOEC (chronic)	0.32 mg/l				
NOEC (chronic)	0.17 mg/l				
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0)					
LC50 - Fish [1]	> 13.4 mg/l Oncorhynchus mykiss (Rainbow trout)				
LOEC (chronic)	0.32 mg/l				
NOEC (chronic)	0.17 mg/l				
Hydrocarbons, C9, aromatics					
LC50 - Fish [1]	9.2 mg/l (OECD 203 method)				
EC50 - Crustacea [1]	3.2 mg/l (OECD 202 method)				
EC50 72h - Algae [1]	2.6 mg/l Pseudokirchneriella subcapitata (OECD 201 method)				
zinc powder— zinc dust (stabilised) (7	'440-66-6)				
LC50 - Fish [1]	0.169 mg/l Oncorhynchus mykiss (Rainbow trout)				
EC50 - Crustacea [1]	0.413 mg/l Ceriodaphnia dubia				
EC50 72h - Algae [1]	0.136 mg/l Pseudokirchneriella subcapitata				
aluminium powder (stabilised) (7429-90-5)					
EC50 72h - Algae [1]	1.05 mg/l				
EC50 72h - Algae [2]	0.2 mg/l				
12.2. Persistence and degradability					
FTC-ZA ZINCALUSPRAY					

12.2. I ersistence and degradability		
FTC-ZA ZINCALUSPRAY		
Persistence and degradability	Not rapidly degradable	
acetone; propan-2-one; propanone (67-64-1)		
Persistence and degradability	Not rapidly degradable	

20/08/2024 (Issue date) 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

3 to 1.0 1.2 to				
isobutane (75-28-5)				
Persistence and degradability	Not rapidly degradable			
dimethyl ether (115-10-6)				
Persistence and degradability	Not rapidly degradable			
xylene (1330-20-7)				
Persistence and degradability	Rapidly degradable			
propane (74-98-6)				
Persistence and degradability	Not rapidly degradable			
butane (106-97-8)				
Persistence and degradability	Not rapidly degradable			
ethylbenzene (100-41-4)				
Persistence and degradability	Rapidly degradable			
Hydrocarbons, C6-C7, n-alkanes, is	oalkanes, cyclics, <5% n-hexane			
Persistence and degradability	Not rapidly degradable			
Hydrocarbons, C7, n-alkanes, isoal	kanes, cyclics (64742-49-0)			
Persistence and degradability	Not rapidly degradable			
Hydrocarbons, C9, aromatics				
Persistence and degradability	Rapidly degradable			
zinc powder— zinc dust (stabilised) (7440-66-6)				
Persistence and degradability	Not rapidly degradable			
aluminium powder (stabilised) (742	9-90-5)			
Persistence and degradability	Not rapidly degradable			
12.3. Bioaccumulative potential				
acetone; propan-2-one; propanone	(67-64-1)			
Partition coefficient n-octanol/water (Log Pow)	-0.24 Source: ICSC			
isobutane (75-28-5)				
Partition coefficient n-octanol/water (Log Pow)	2.76			
dimethyl ether (115-10-6)				
Partition coefficient n-octanol/water (Log Pow)	0.1			
xylene (1330-20-7)				
Bioconcentration factor (BCF REACH)	25.9			
Partition coefficient n-octanol/water (Log Pow)	3.2			
propane (74-98-6)				
Partition coefficient n-octanol/water (Log Pow)	2.36			
Hydrocarbons, C9, aromatics				
Partition coefficient n-octanol/water (Log Pow)	2.1 – 6 Source: IUCLID			
12.4. Mobility in soil				
dimethyl ether (115-10-6)				

20/08/2024 (Issue date) 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### 12.5. Results of PBT and vPvB assessment

Component		
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Hydrocarbons, C9, aromatics	
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Hydrocarbons, C9, aromatics	

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

No additional information available

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional waste regulation

Waste treatment methods

Product/Packaging disposal recommendations

Additional information

European List of Waste (LoW, EC 2000/532)

- : Disposal must be done according to official regulations.
- Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : Discharging into rivers and drains is forbidden.
- : Special waste.
- : 16 05 04\* gases in pressure containers (including halons) containing dangerous substances
  - 15 01 04 metallic packaging

### **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name		
AEROSOLS	AEROSOLS	Aerosols, flammable
Transport document description		
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1
14.3. Transport hazard class(es)		
2.1	2.1	2.1
2	2	2
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No

EmS-No. (Fire): F-D EmS-No. (Spillage): S-U

No supplementary information available

### 14.6. Special precautions for user

### Overland transport

Classification code (ADR) : 5F

Special provisions (ADR) : 190, 327, 344, 625

Limited quantities (ADR): 11Excepted quantities (ADR): E0Packing instructions (ADR): P207, LP200

20/08/2024 (Issue date) GB - en 13/17 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Special packing provisions (ADR) : PP87, RR6, L2

 Mixed packing provisions (ADR)
 : MP9

 Transport category (ADR)
 : 2

 Special provisions for carriage - Packages (ADR)
 : V14

 Tunnel restriction code (ADR)
 : D

Transport by sea

Special provisions (IMDG) : 63, 190, 277, 327, 344, 381, 959

Packing instructions (IMDG) : P207, LP200 Special packing provisions (IMDG) : PP87, L2

Air transport

PCA packing instructions (IATA) : 203
PCA max net quantity (IATA) : 75kg
CAO packing instructions (IATA) : 203
CAO max net quantity (IATA) : 150kg

Special provisions (IATA) : A145, A167, A802

ERG code (IATA) : 10L

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

#### **SECTION 15: Regulatory information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **EU-Regulations**

#### **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

### Council Regulation (EC) for the control of dual-use items

Contains substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items: Aluminium powder (7429-90-5).

#### **Explosives Precursors Regulation (2019/1148)**

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **ANNEX II REPORTABLE EXPLOSIVES PRECURSORS**

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported within 24 hours.

Name		Nomenclature	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Acetone	67-64-1	2914 11 00	ex 3824 99 92

#### **Drug Precursors Regulation (273/2004)**

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

20/08/2024 (Issue date) GB - en 14/17 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

	CN designatio n	CAS-No.		Category, Subcategory	Threshold	Annex
Acetone		67-64-1	2914 11 00	Category 3		Annex I

# 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  ADR European Agreement concerning the International Carriage of Dangerous Goods by Road  ATE Acute Toxicity Estimate  BCF Biboconcentration factor  BILV Bibloogical limit value  BOD Bibochemical oxygen demand (BOD)  COD Chemical oxygen demand (BOD)  COD Derived Minimal Effect level  Derived-No Effect Level  EC-No. European Community number  EC-SO Modian effective concentration  EN European Standard International Agency for Research on Cancer International Agency for Research on Cancer International Maritime Dangerous Goods  LCSO Median lethal dose  LCSO Median lethal dose  LOSE No-Cheerved Effect Concentration  NOAEL No-Observed Adverse Effect Level  NOAEL No-Observed Adverse Effect Level  NOAEL No-Observed Effect Concentration  CECD Organisation for Economic Go-operation and Development  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Perdicted No-Effect Concentration  TIDD Regulations concentration  TIDD Sewage treatment plant  ThO Thoro Theoretical Oxygen demand (ThOD)  TILM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  NO.S. War Very Persistent and Very Bioaccumulative  ED Endocrine disruptor	Abbreviations and acronyms:				
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road  ATE Acute Toxicity Estimate  BCF Biconcernitation factor  BLV Biological limit value  BOD Biochemical oxygen demand (BOD)  COD Chemical oxygen demand (BOD)  CDD Chemical oxygen demand (COD)  DMEL Derived Minimal Effect level  DNEL Derived No European Community number  ECGO Median effective concentration  EN European Standard  International Agency for Research on Cancer  IATA International Agency for Research on Cancer  IATA International Martime Dangerous Goods  LCGO Median lethal concentration  LDSO Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  NOAEL No-Observed Effect Concentration  CECD Organisation for Economic Co-operation and Development  OEC Organisation for Economic Co-operation and Development  OEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SIP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  PNOS. Volatile Organic Compounds  CNO-S-No, Chemical Abstract Service number  N.O.S. Not Otherwise Specified  VvoR Very Pensistent and Very Bioaccumulative					
ATE Acute Toxicity Estimate  BCF Bloconcentration factor  BLV Biological limit value  BOD Blochemical oxygen demand (BOD)  COD Chemical oxygen demand (COD)  DMEL Derived Minimal Effect level  DNEL Derived Minimal Effect level  EC-No. European Community number  EC50 Median effective concentration  EN European Standard  International Agency for Research on Cancer  IATA International Agency for Research on Cancer  IATA International Affective Dangerous Goods  LC50 Median lethal concentration  IMDG International Affective Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal concentration  NOAEC No-Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Concentration  NOAEL No-Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OECD Organisation for Economic Co-operation and Development  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SID Servey Data Sheet  STP Servege treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  Vvey Persistent and Very Bioaccumulative					
BCF         Bioconcentration factor           BLV         Biological limit value           BCO         Biochemical oxygen demand (BOD)           CCD         Chemical oxygen demand (COD)           DMEL         Derived Minimal Effect level           DNEL         Derived Minimal Effect level           DNEL         Derived Minimal Effect level           EC-No.         European Community number           EC50         Median affective concentration           EN         European Standard           INC         International Agency for Research on Cancer           IATA         International Agreecy Effect Agency Effect Concentration           IADG         Median Lethal dose           LOSD         Median Lethal dose           LOSD         No-Observed Adverse Effect Level           NO					
BLV Bloogical limit value BOD Biochemical oxygen demand (BOD) COD Chemical oxygen demand (COD) DMEL Derived Minimal Effect level DNEL Derived Minimal Effect level EC-No. European Community number ECS0 Median effective concentration EN European Standard IARC International Agency for Research on Cancer IATA International Maritime Dangerous Goods LC50 Median lethal concentration IADS International Maritime Dangerous Goods LC50 Median lethal dose LOAEL Lovest Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Concentration NOEC No-Observed Adverse Effect Concentration OECD Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit PBT Persistent Biococumulative Toxic PNEC Predicted No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet STP Sewage treatment plant ThOD Theoretical oxygen demand (ThOD) TLM Median Tolerance Limit VOC Votatile Organic Compounds CAS-No. Chemical Abstract Service number N.O.S. Not Otherwise Specified VPVB Very Persistent and Very Bioaccumulative					
BOD Bichemical oxygen demand (BOD) COD Chemical oxygen demand (COD) DMEL Derived Minimal Effect level DNEL Derived-No Effect Level EC-No. European Community number ECSO Median effective concentration EN European Standard IARC International Agency for Research on Cancer IATA International Ajer Toylor Association IMDG International Ajer Toylor Association IMDG Median lethal concentration LOSO Median lethal dose LOAEL Lowest Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Concentration NOAEL No-Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Concentration OECD Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit PBT Persistent Bioaccumulative Toxic PNEC Predicted No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet STP Sewage treatment plant ThOD Theoretical oxygen demand (ThOD) TLM Median Tolerance Limit VOAS (Chemical Abstract Service number N.O.S. Not Otherwise Specified VPVB Very Persistent and Very Bioaccumulative PVFB Very Persistent and Very Bioaccumulative					
COD Chemical oxygen demand (COD)  DMEL Derived Minimal Effect level  DNEL Derived Minimal Effect Level  EC-No. European Community number  ECSO Median effective concentration  EN European Standard  IARC International Agency for Research on Cancer  IATA International Agency for Research on Cancer  IATA International Agency for Research on Cancer  IATA International Maritime Dangerous Goods  LCSO Median lethal concentration  LDSO Median lethal concentration  LDSO Median lethal concentration  LDSO Median lethal concentration  NOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  GECD Organisation for Economic Co-operation and Development  GEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  VPVB Very Persistent and Very Bioaccumulative		-			
DMEL Derived Minimal Effect level  DNEL Derived-No Effect Level  EC-No. European Community number  ECSO Median effective concentration  EN European Standard  International Agency for Research on Cancer  IATA International Agency for Research on Cancer  IATA International Agency for Research on Cancer  IATA International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal concentration  LD50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Concentration  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OELD Organisation for Economic Co-operation and Development  OEL Occupational Exposure Limit  PBT Persistent Bloaccumulative Toxic  PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  VPVB Very Persistent and Very Bioaccumulative		Biochemical oxygen demand (BOD)			
Derived-No Effect Level  EC-No. European Community number  EC50 Median effective concentration  EN European Standard  International Agency for Research on Cancer  IATA International Air Transport Association  IIMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safely Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatie Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  VPVB Very Persistent and Very Bioaccumulative	COD	Chemical oxygen demand (COD)			
EC-No. European Community number EC50 Median effective concentration EN European Standard IARC International Agency for Research on Cancer IATA International Agency for Research on Cancer IATA International Air Transport Association IMDG International Maritime Dangerous Goods LC50 Median lethal concentration LD50 Median lethal dose LOAEL Lowest Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Level NOEC No-Observed Adverse Effect Level NOEC No-Observed Effect Concentration OECD Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit PBT Persistent Bioaccumulative Toxic PNEC Predicted No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet STP Sewage treatment plant ThOD Theoretical oxygen demand (ThOD) TLM Median Tolerance Limit VOC Volatile Organic Compounds CAS-No. Chemical Abstract Service number N.O.S. Not Otherwise Specified vPVB Very Persistent and Very Bioaccumulative	DMEL	Derived Minimal Effect level			
EC50 Median effective concentration EN European Standard IARC International Agency for Research on Cancer IATA International Air Transport Association IMDG International Air Transport Association IMDG Median lethal concentration LD50 Median lethal dose LOAEL Lowest Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Level NOAEL No-Observed Adverse Effect Level NOEC No-Observed Adverse Effect Level NOEC No-Observed Effect Concentration OECD Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit PBT Persistent Bioaccumulative Toxic PNEC Predicted No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet ThOD Theoretical oxygen demand (ThOD) TLM Median Tolerance Limit VOC Volatile Organic Compounds CAS-No. Chemical Abstract Service number N.O.S. Not Otherwise Specified VPVB Very Persistent and Very Bioaccumulative	DNEL	Derived-No Effect Level			
EN European Standard  IARC International Agency for Research on Cancer  IATA International Agency for Research on Cancer  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OECD Organisation for Economic Co-operation and Development  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PPNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  vPvB Very Persistent and Very Bioaccumulative	EC-No.	European Community number			
IATA International Agency for Research on Cancer  IATA International Agency for Research on Cancer  IMDG International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOEC No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OECD Organisation for Economic Co-operation and Development  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  VPVB Very Persistent and Very Bioaccumulative	EC50	Median effective concentration			
INTA International Air Transport Association IMDG International Maritime Dangerous Goods LC50 Median lethal concentration LD50 Median lethal dose LOAEL Lowest Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Level NOAEL No-Observed Adverse Effect Level NOEC No-Observed Effect Concentration OECD Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit PBT Persistent Bioaccumulative Toxic PNEC Predicted No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet STP Sewage treatment plant ThOD Theoretical oxygen demand (ThOD) TLM Median Tolerance Limit VOC Volatile Organic Compounds CAS-No. Chemical Abstract Service number N.O.S. Not Otherwise Specified VPVB Very Persistent and Very Bioaccumulative	EN	European Standard			
International Maritime Dangerous Goods  LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OECD Organisation for Economic Co-operation and Development  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  VPVB Very Persistent and Very Bioaccumulative	IARC	International Agency for Research on Cancer			
LC50 Median lethal concentration  LD50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OECD Organisation for Economic Co-operation and Development  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  VPVB Very Persistent and Very Bioaccumulative	IATA	International Air Transport Association			
LO50 Median lethal dose  LOAEL Lowest Observed Adverse Effect Level  NOAEC No-Observed Adverse Effect Level  NOAEL No-Observed Adverse Effect Level  NOEC No-Observed Effect Concentration  OECD Organisation for Economic Co-operation and Development  OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  VPVB Very Persistent and Very Bioaccumulative	IMDG	International Maritime Dangerous Goods			
LOAEL  Lowest Observed Adverse Effect Level  NOAEC  No-Observed Adverse Effect Concentration  NOAEL  No-Observed Adverse Effect Level  NOEC  No-Observed Effect Concentration  OECD  Organisation for Economic Co-operation and Development  OEL  Occupational Exposure Limit  PBT  Persistent Bioaccumulative Toxic  PNEC  Predicted No-Effect Concentration  RID  Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS  Safety Data Sheet  STP  Sewage treatment plant  ThOD  Theoretical oxygen demand (ThOD)  TLM  Median Tolerance Limit  VOC  Volatile Organic Compounds  CAS-No.  Chemical Abstract Service number  N.O.S.  Not Otherwise Specified  VPVB  Very Persistent and Very Bioaccumulative	LC50	Median lethal concentration			
NOAEC No-Observed Adverse Effect Concentration NOAEL No-Observed Adverse Effect Level NOEC No-Observed Effect Concentration OECD Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit PBT Persistent Bioaccumulative Toxic PNEC Predicted No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet STP Sewage treatment plant ThOD Theoretical oxygen demand (ThOD) TLM Median Tolerance Limit VOC Volatile Organic Compounds CAS-No. Chemical Abstract Service number N.O.S. Not Otherwise Specified VPVB Very Persistent and Very Bioaccumulative	LD50	Median lethal dose			
NOAEL NO-Observed Adverse Effect Level NOEC No-Observed Effect Concentration OECD Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit PBT Persistent Bioaccumulative Toxic PNEC Predicted No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet STP Sewage treatment plant ThOD Theoretical oxygen demand (ThOD) TLM Median Tolerance Limit VOC Volatile Organic Compounds CAS-No. Chemical Abstract Service number N.O.S. Not Otherwise Specified VPVB Very Persistent and Very Bioaccumulative	LOAEL	Lowest Observed Adverse Effect Level			
NOEC  No-Observed Effect Concentration  OECD  Organisation for Economic Co-operation and Development  OEL  Occupational Exposure Limit  PBT  Persistent Bioaccumulative Toxic  PNEC  Predicted No-Effect Concentration  RID  Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS  Safety Data Sheet  STP  Sewage treatment plant  ThOD  Theoretical oxygen demand (ThOD)  TLM  Median Tolerance Limit  VOC  Volatile Organic Compounds  CAS-No.  Chemical Abstract Service number  N.O.S.  Not Otherwise Specified  VPVB  Very Persistent and Very Bioaccumulative	NOAEC	No-Observed Adverse Effect Concentration			
OECD Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  VPVB Very Persistent and Very Bioaccumulative	NOAEL	No-Observed Adverse Effect Level			
OEL Occupational Exposure Limit  PBT Persistent Bioaccumulative Toxic  PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  VPVB Very Persistent and Very Bioaccumulative	NOEC	No-Observed Effect Concentration			
PBT Persistent Bioaccumulative Toxic PNEC Predicted No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet STP Sewage treatment plant ThOD Theoretical oxygen demand (ThOD) TLM Median Tolerance Limit VOC Volatile Organic Compounds CAS-No. Chemical Abstract Service number N.O.S. Not Otherwise Specified VPVB Very Persistent and Very Bioaccumulative	OECD	Organisation for Economic Co-operation and Development			
PNEC Predicted No-Effect Concentration  RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  vPvB Very Persistent and Very Bioaccumulative	OEL	Occupational Exposure Limit			
RID Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  vPvB Very Persistent and Very Bioaccumulative	PBT	Persistent Bioaccumulative Toxic			
SDS Safety Data Sheet  STP Sewage treatment plant  ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  vPvB Very Persistent and Very Bioaccumulative	PNEC	Predicted No-Effect Concentration			
STP Sewage treatment plant ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  vPvB Very Persistent and Very Bioaccumulative	RID	Regulations concerning the International Carriage of Dangerous Goods by Rail			
ThOD Theoretical oxygen demand (ThOD)  TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  vPvB Very Persistent and Very Bioaccumulative	SDS	Safety Data Sheet			
TLM Median Tolerance Limit  VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  vPvB Very Persistent and Very Bioaccumulative	STP	Sewage treatment plant			
VOC Volatile Organic Compounds  CAS-No. Chemical Abstract Service number  N.O.S. Not Otherwise Specified  vPvB Very Persistent and Very Bioaccumulative	ThOD	Theoretical oxygen demand (ThOD)			
CAS-No.  Chemical Abstract Service number  N.O.S.  Not Otherwise Specified  vPvB  Very Persistent and Very Bioaccumulative	TLM	Median Tolerance Limit			
N.O.S. Not Otherwise Specified  vPvB Very Persistent and Very Bioaccumulative	VOC	Volatile Organic Compounds			
vPvB Very Persistent and Very Bioaccumulative	CAS-No.	Chemical Abstract Service number			
	N.O.S.	Not Otherwise Specified			
ED Endocrine disruptor	vPvB	Very Persistent and Very Bioaccumulative			
	ED	Endocrine disruptor			

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ruii text of H- and I	EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Aerosol 1	Aerosol, Category 1	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Asp. Tox. 1	Aspiration hazard, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Gas 1	Flammable gases, Category 1	
Flam. Liq. 2	Flammable liquids, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
Press. Gas (Comp.)	Gases under pressure : Compressed gas	
Press. Gas (Liq.)	Gases under pressure : Liquefied gas	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis	
H220	Extremely flammable gas.	
H222	Extremely flammable aerosol.	
H225	Highly flammable liquid and vapour.	
H226	Flammable liquid and vapour.	
H229	Pressurised container: May burst if heated.	
H280	Contains gas under pressure; may explode if heated.	
H304	May be fatal if swallowed and enters airways.	
H312	Harmful in contact with skin.	
H315	Causes skin irritation.	
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.	
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.	
EUH066	Repeated exposure may cause skin dryness or cracking.	

# Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Aerosol 1	H222;H229	On basis of test data
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
STOT SE 3	H336	Expert judgement
STOT RE 2	H373	Calculation method
Asp. Tox. 1	H304	Calculation method
Aquatic Chronic 2	H411	Calculation method

20/08/2024 (Issue date) 03/02/2025 (Printing date)

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.