

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product name : ZG-90  
UFI : 5DAY-U854-Q00Q-D081  
Product code : BDS002715AE  
Vaporizer : Aerosol

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

Main use category : Professional use  
Use of the substance/mixture : Paints

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet****Supplier**

CRC Industries Europe UK Limited  
Wylds Road Castlefield Industrial Estate  
TA6 4DD Bridgwater Somerset  
United Kingdom  
T +44 1278 727200 - F +44 1278 425644  
[hse.uk@crcind.com](mailto:hse.uk@crcind.com) - [www.crcind.com](http://www.crcind.com)

**1.4. Emergency telephone number**

No additional information available

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Aerosol, Category 1 H222;H229  
Skin corrosion/irritation, Category 2 H315  
Specific target organ toxicity – Single exposure, Category 3, H336  
Narcosis  
Hazardous to the aquatic environment – Chronic Hazard, H412  
Category 3  
Full text of H- and EUH-statements: see section 16

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

Pressurised container: May burst if heated. Extremely flammable aerosol. May cause drowsiness or dizziness. Causes skin irritation. Harmful to aquatic life with long lasting effects.

**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; 2-methoxy-1-methylethyl acetate  
Hazard statements (CLP) : H222 - Extremely flammable aerosol.  
H229 - Pressurised container: May burst if heated.

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Precautionary statements (CLP)	<p>H315 - Causes skin irritation. H336 - May cause drowsiness or dizziness. H412 - Harmful to aquatic life with long lasting effects.</p> <p>: P102 - Keep out of reach of children. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 - Do not spray on an open flame or other ignition source. P251 - Do not pierce or burn, even after use. P261 - Avoid breathing vapours/spray. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C. P501 - Dispose of contents/container to a hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.</p>
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### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

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 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 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
dimethyl ether (Propellant gas (Aerosol)) substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 115-10-6 EC-No.: 204-065-8 EC Index-No.: 603-019-00-8 REACH-no: 01-2119472128-37	50 – 75	Flam. Gas 1, H220 Press. Gas (Liq.), H280
xylene substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 1330-20-7 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9 REACH-no: 01-2119488216-32	25 – 50	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Skin Irrit. 2, H315
acetone; propan-2-one; propanone substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 67-64-1 EC-No.: 200-662-2 EC Index-No.: 606-001-00-8 REACH-no: 01-2119471330-49	2.5 – 10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
2-methoxy-1-methylethyl acetate substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 108-65-6 EC-No.: 203-603-9 EC Index-No.: 607-195-00-7 REACH-no: 01-2119475791-29	2.5 – 10	Flam. Liq. 3, H226 STOT SE 3, H336

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethylbenzene substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 100-41-4 EC-No.: 202-849-4 EC Index-No.: 601-023-00-4 REACH-no: 01-2119489370-35	2.5 – 10	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Talc (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> ) substance with national workplace exposure limit(s) (GB)	CAS-No.: 14807-96-6 EC-No.: 238-877-9 REACH-no: 01-2120140278-58	2.5 – 10	Not classified
trizinc bis(orthophosphate)	CAS-No.: 7779-90-0 EC-No.: 231-944-3 EC Index-No.: 030-011-00-6	0.25 – 2.5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
fatty acids, C6-19-branched, zinc salts	CAS-No.: 68551-44-0 EC-No.: 271-378-4 REACH-no: 01-2119980048-32	< 2.5	Aquatic Chronic 2, H411

Product subject to CLP Article 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	: Call a poison center or a doctor if you feel unwell. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If signs/symptoms develop, get medical attention.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention. Seek medical attention if irritation develops.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Seek medical attention if irritation develops.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Irritation. Repeated exposure may cause skin dryness or cracking.

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

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 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	: During fire, gases hazardous to health may be formed.

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### 5.3. Advice for firefighters

- Firefighting instructions : Move containers from fire area if it can be done without personal risk. Use standard firefighting procedures and consider the hazards of other involved materials.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

- Protective equipment : Wear appropriate protective equipment and clothing during clean-up.
- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

#### 6.1.2. 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".
- Emergency procedures : Evacuate unnecessary personnel. Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment. Avoid the spillage or runoff entering drains, sewers or watercourses.

### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Mechanically recover the product. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Following product recovery, flush area with water. Take up small spills with dry chemical absorbent. Clean surface thoroughly to remove residual contamination.
- Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For disposal of contaminated materials refer to section 13 : "Disposal considerations".

## 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. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid prolonged exposure. Handle in accordance with good industrial hygiene and safety procedures.
- Hygiene measures : Wash contaminated clothing before reuse. 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. Store in a well-ventilated place. Keep cool. Keep container closed when not in use.

### 7.3. Specific end use(s)

No additional information available

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

###### dimethyl ether (115-10-6)

###### EU - Indicative Occupational Exposure Limit (IOEL)

Local name	Dimethylether
IOEL TWA	1920 mg/m <sup>3</sup>
IOEL TWA [ppm]	1000 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

###### United Kingdom - Occupational Exposure Limits

Local name	Dimethyl ether
WEL TWA (OEL TWA) [1]	766 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	400 ppm
WEL STEL (OEL STEL)	958 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	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/m <sup>3</sup>
IOEL TWA [ppm]	50 ppm
IOEL STEL	442 mg/m <sup>3</sup>
IOEL STEL [ppm]	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

###### United Kingdom - Occupational Exposure Limits

Local name	Xylene
WEL TWA (OEL TWA) [1]	220 mg/m <sup>3</sup> o-,m-,p- or mixed isomers
WEL TWA (OEL TWA) [2]	50 ppm o-,m-,p- or mixed isomers
WEL STEL (OEL STEL)	441 mg/m <sup>3</sup> o-,m-,p- or mixed isomers
WEL STEL (OEL STEL) [ppm]	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

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<b>acetone; propan-2-one; propanone (67-64-1)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Acetone
IOEL TWA	1210 mg/m <sup>3</sup>
IOEL TWA [ppm]	500 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Acetone
WEL TWA (OEL TWA) [1]	1210 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	500 ppm
WEL STEL (OEL STEL)	3620 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	1500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>2-methoxy-1-methylethyl acetate (108-65-6)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	2-Methoxy-1-methylethylacetate
IOEL TWA	275 mg/m <sup>3</sup>
IOEL TWA [ppm]	50 ppm
IOEL STEL	550 mg/m <sup>3</sup>
IOEL STEL [ppm]	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	1-Methoxypropyl acetate
WEL TWA (OEL TWA) [1]	274 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	548 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	100 ppm
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
<b>ethylbenzene (100-41-4)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Ethylbenzene
IOEL TWA	442 mg/m <sup>3</sup>
IOEL TWA [ppm]	100 ppm
IOEL STEL	884 mg/m <sup>3</sup>
IOEL STEL [ppm]	200 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

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ethylbenzene (100-41-4)	
United Kingdom - Occupational Exposure Limits	
Local name	Ethylbenzene
WEL TWA (OEL TWA) [1]	441 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	100 ppm
WEL STEL (OEL STEL)	552 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	125 ppm
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
Talc (Mg3H2(SiO3)4) (14807-96-6)	
United Kingdom - Occupational Exposure Limits	
Local name	Talc
WEL TWA (OEL TWA) [1]	1 mg/m <sup>3</sup> respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>8.1.2. Recommended monitoring procedures</b>	
No additional information available	
<b>8.1.3. Air contaminants formed</b>	
No additional information available	
<b>8.1.4. DNEL and PNEC</b>	
xylene (1330-20-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	442 mg/m <sup>3</sup>
Acute - local effects, inhalation	442 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	212 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	221 mg/m <sup>3</sup>
Long-term - local effects, inhalation	221 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	260 mg/m <sup>3</sup>
Acute - local effects, inhalation	260 mg/m <sup>3</sup>
Long-term - systemic effects, oral	12.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	65.3 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	125 mg/kg bodyweight/day
Long-term - local effects, inhalation	65.3 mg/m <sup>3</sup>
PNEC (Water)	
PNEC aqua (freshwater)	0.327 mg/l
PNEC aqua (marine water)	0.327 mg/l
PNEC aqua (intermittent, freshwater)	0.327 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	12.46 mg/kg dwt

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<b>xylene (1330-20-7)</b>	
PNEC sediment (marine water)	12.46 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	2.31 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	6.58 mg/l
<b>acetone; propan-2-one; propanone (67-64-1)</b>	
<b>DNEL/DMEL (Workers)</b>	
Acute - local effects, inhalation	2420 mg/m³
Long-term - systemic effects, dermal	186 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1210 mg/m³
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	62 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	200 mg/m³
Long-term - systemic effects, dermal	62 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	10.6 mg/l
PNEC aqua (marine water)	1.06 mg/l
PNEC aqua (intermittent, freshwater)	21 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	30.4 mg/kg dwt
PNEC sediment (marine water)	3.04 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	29.5 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	100 mg/l
<b>2-methoxy-1-methylethyl acetate (108-65-6)</b>	
<b>DNEL/DMEL (Workers)</b>	
Acute - local effects, inhalation	550 mg/m³
Long-term - systemic effects, dermal	796 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	275 mg/m³
<b>DNEL/DMEL (General population)</b>	
Acute - systemic effects, oral	500 mg/kg bodyweight/day
Long-term - systemic effects, oral	36 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	33 mg/m³
Long-term - systemic effects, dermal	320 mg/kg bodyweight/day
Long-term - local effects, inhalation	33 mg/m³
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.635 mg/l



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2-methoxy-1-methylethyl acetate (108-65-6)	
PNEC aqua (marine water)	0.0635 mg/l
PNEC aqua (intermittent, freshwater)	6.35 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	3.29 mg/kg dwt
PNEC sediment (marine water)	0.329 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0.29 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	100 mg/l
ethylbenzene (100-41-4)	
<b>DNEL/DMEL (Workers)</b>	
Acute - local effects, inhalation	293 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	180 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	77 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	1.6 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	15 mg/m <sup>3</sup>
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (marine water)	0.01 mg/l
PNEC aqua (intermittent, freshwater)	0.1 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	13.7 mg/kg dwt
PNEC sediment (marine water)	1.37 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	2.68 mg/kg dwt
<b>PNEC (Oral)</b>	
PNEC oral (secondary poisoning)	0.02 g/kg food
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	9.6 mg/l
Talc (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> ) (14807-96-6)	
<b>DNEL/DMEL (Workers)</b>	
Acute - systemic effects, inhalation	2.16 mg/m <sup>3</sup>
Acute - local effects, inhalation	3.6 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	43.2 mg/kg bodyweight/day
Long-term - local effects, dermal	4.54 mg/cm <sup>2</sup>
Long-term - systemic effects, inhalation	2.16 mg/m <sup>3</sup>
Long-term - local effects, inhalation	3.6 mg/m <sup>3</sup>

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### Talc ( $\text{Mg}_3\text{H}_2(\text{SiO}_3)_4$ ) (14807-96-6)

#### DNEL/DMEL (General population)

Acute - systemic effects, inhalation	1.08 mg/m <sup>3</sup>
Acute - systemic effects, oral	160 mg/kg bodyweight/day
Acute - local effects, inhalation	1.8 mg/m <sup>3</sup>
Long-term - systemic effects, oral	160 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1.08 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	21.6 mg/kg bodyweight/day
Long-term - local effects, dermal	2.27 mg/cm <sup>2</sup>
Long-term - local effects, inhalation	1.8 mg/m <sup>3</sup>

#### PNEC (Water)

PNEC aqua (freshwater)	597.97 mg/l
PNEC aqua (marine water)	141.26 mg/l
PNEC aqua (intermittent, freshwater)	597.97 mg/l
PNEC aqua (intermittent, marine water)	141.26 mg/l

#### PNEC (Sediment)

PNEC sediment (freshwater)	31.33 mg/kg dwt
PNEC sediment (marine water)	3.13 mg/kg dwt

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

#### 8.2.2. Personal protection equipment

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



##### 8.2.2.1. Eye and face protection

###### Eye protection:

Use eye protection according to EN 166. Safety glasses with side shields.

##### 8.2.2.2. Skin protection

###### Skin and body protection:

Wear suitable protective clothing

###### Hand protection:

Wear suitable gloves tested to EN374. The breakthrough time of the glove should be longer than the total duration of product use. If work lasts longer than the breakthrough time, gloves should be changed part-way through. Nitrile gloves are recommended.

##### 8.2.2.3. Respiratory protection

###### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Approved organic vapour respirator. Filter type: AX

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### 8.2.2.4. Thermal hazards

#### Thermal hazard protection:

Not expected to present a significant hazard under anticipated conditions of normal use. Wear appropriate thermal protective clothing, when necessary.

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: See color cap.
Appearance	: DME propelled liquid.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Extremely flammable aerosol.
Explosive properties	: Pressurised container: May burst if heated.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: < 21 °C (closed cup)
Auto-ignition temperature	: > 200 °C
Decomposition temperature	: Not available
pH	: Not applicable
Viscosity, kinematic	: > 20.5 mm <sup>2</sup> /s at 20 °C
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not applicable
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.09 g/cm <sup>3</sup> at 20 °C
Relative density	: 1.09 at 20 °C
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

% of flammable ingredients	: 75 – 100 %
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#### 9.2.2. Other safety characteristics

VOC content	: 618 (Cat.II B(e) VOC max 840 g/L)
Additional information	: For aerosols data for the product without propellant.

## 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.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified. (Based on available data, the classification criteria are not met)

#### dimethyl ether (115-10-6)

LC50 Inhalation - Rat	308.5 mg/l/4h
LC50 Inhalation - Rat [ppm]	164000 ppm

#### xylene (1330-20-7)

LD50 oral	4300 mg/kg bodyweight
LD50 dermal rabbit	12126 mg/kg bodyweight
LC50 Inhalation - Rat [ppm]	> ppm

#### acetone; propan-2-one; propanone (67-64-1)

LD50 oral rat	5800 mg/kg bodyweight
LD50 dermal	> 15688 mg/kg bodyweight
LC50 Inhalation - Rat	76 mg/l/4h

#### 2-methoxy-1-methylethyl acetate (108-65-6)

LD50 oral rat	> 5000 mg/kg
LD50 oral	8532 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
LD50 dermal	> 5000 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	> 10800 mg/l

#### ethylbenzene (100-41-4)

LD50 oral rat	≈ 3500 mg/kg bodyweight
LD50 oral	3500 mg/kg bodyweight

#### Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>) (14807-96-6)

LD50 oral rat	> 5000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight

#### trizinc bis(orthophosphate) (7779-90-0)

LD50 oral rat	> 5000 mg/kg bodyweight
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#### fatty acids, C<sub>6</sub>-19-branched, zinc salts (68551-44-0)

LD50 oral rat	2066 mg/kg
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fatty acids, C6-19-branched, zinc salts (68551-44-0)	
LD50 dermal rat	> 3640 mg/kg
<b>Skin corrosion/irritation</b>	: Causes skin irritation. pH: Not applicable
<b>Serious eye damage/irritation</b>	: Not classified (Based on available data, the classification criteria are not met) pH: Not applicable
<b>Respiratory or skin sensitisation</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Germ cell mutagenicity</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Carcinogenicity</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Reproductive toxicity</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>STOT-single exposure</b>	: May cause drowsiness or dizziness.
acetone; propan-2-one; propanone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.
2-methoxy-1-methylethyl acetate (108-65-6)	
STOT-single exposure	May cause drowsiness or dizziness.
<b>STOT-repeated exposure</b>	: Not classified (Based on available data, the classification criteria are not met)
2-methoxy-1-methylethyl acetate (108-65-6)	
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight
ethylbenzene (100-41-4)	
NOAEL (oral, rat, 90 days)	75 mg/kg bodyweight
STOT-repeated exposure	May cause damage to organs (hearing organs) through prolonged or repeated exposure.
<b>Aspiration hazard</b>	: Not classified (Based on available data, the classification criteria are not met)
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Vaporizer	Aerosol
Viscosity, kinematic	> 20.5 mm²/s at 20 °C

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : 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 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 at a concentration equal to or greater than 0,1 %

#### 11.2.2. Other information

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.  
Not rapidly degradable

dimethyl ether (115-10-6)	
LC50 - Fish [1]	> 4.1 g/l

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<b>dimethyl ether (115-10-6)</b>	
EC50 - Crustacea [1]	> 4.4 g/l Daphnia magna (Water flea)
EC50 96h - Algae [1]	154917 mg/l
<b>acetone; propan-2-one; propanone (67-64-1)</b>	
LC50 - Fish [1]	5540 mg/l
EC50 - Other aquatic organisms [1]	12600 mg/l Daphnia magna (Water flea)
LOEC (chronic)	> 79 mg/l
NOEC (chronic)	≥ 79 mg/l
<b>2-methoxy-1-methylethyl acetate (108-65-6)</b>	
LC50 - Fish [1]	> 100 mg/l
EC50 - Crustacea [1]	> 500 mg/l
EC50 - Other aquatic organisms [1]	408 mg/l
EC50 - Other aquatic organisms [2]	> 1000 mg/l
EC50 72h - Algae [1]	> 1000 mg/l
NOEC (chronic)	≥ 100 mg/l
NOEC chronic fish	47.5 mg/l
<b>ethylbenzene (100-41-4)</b>	
LC50 - Fish [1]	5.1 mg/l Menidia menidia
EC50 72h - Algae [1]	5.4 mg/l Raphidocelis subcapitata
EC50 96h - Algae [2]	7.7 mg/l Skeletonema costatum
<b>Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>) (14807-96-6)</b>	
LC50 - Fish [1]	89581.02 mg/l
LC50 - Fish [2]	110000 mg/l
EC50 96h - Algae [1]	7202.7 mg/l
NOEC (chronic)	1459.798 mg/l 30 d
<b>12.2. Persistence and degradability</b>	
<b>ZG-90</b>	
Persistence and degradability	Not established. No data is available on the degradability of this product.
<b>12.3. Bioaccumulative potential</b>	
<b>ZG-90</b>	
Partition coefficient n-octanol/water (Log Kow)	Not applicable
<b>dimethyl ether (115-10-6)</b>	
Partition coefficient n-octanol/water (Log Pow)	0.07
<b>xylene (1330-20-7)</b>	
Partition coefficient n-octanol/water (Log Pow)	3.1
<b>acetone; propan-2-one; propanone (67-64-1)</b>	
Partition coefficient n-octanol/water (Log Pow)	-0.24

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### 2-methoxy-1-methylethyl acetate (108-65-6)

Partition coefficient n-octanol/water (Log Pow)	1.2
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### ethylbenzene (100-41-4)

Partition coefficient n-octanol/water (Log Pow)	3.6
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### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

#### ZG-90

Results of PBT assessment	Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII
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### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : 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 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 at a concentration equal to or greater than 0,1 %.

### 12.7. Other adverse effects

Additional information : No other effects known  
Global warming potential (GWP) : 1 (Fluorinated greenhouse gases - (EC) No 517/2014)

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
European List of Waste (LoW) code : According to the European Waste Catalogue (EWC), Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: Transport information






In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
<b>14.2. UN proper shipping name</b>				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
<b>Transport document description</b>				
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
<b>14.3. Transport hazard class(es)</b>				
2.1	2.1	2.1	2.1	2.1

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ADR	IMDG	IATA	ADN	RID
				
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
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)	: 1I
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P207, LP200
Special packing provisions (ADR)	: PP87, RR6, L2
Mixed packing provisions (ADR)	: MP9
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V14
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV9, CV12
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: D

#### Transport by sea

Special provisions (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP200
Special packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D
EmS-No. (Spillage)	: S-U
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69

#### Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
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

#### Inland waterway transport

Classification code (ADN)	: 5F
Special provisions (ADN)	: 190, 327, 344, 625
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E0



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Equipment required (ADN) : PP, EX, A  
Ventilation (ADN) : VE01, VE04  
Number of blue cones/lights (ADN) : 1

### Rail transport

Classification code (RID) : 5F  
Special provisions (RID) : 190, 327, 344, 625  
Limited quantities (RID) : 1L  
Excepted quantities (RID) : E0  
Packing instructions (RID) : P207, LP200  
Special packing provisions (RID) : PP87, RR6, L2  
Mixed packing provisions (RID) : MP9  
Transport category (RID) : 2  
Special provisions for carriage – Packages (RID) : W14  
Special provisions for carriage - Loading, unloading and handling (RID) : CW9, CW12  
Colis express (express parcels) (RID) : CE2  
Hazard identification number (RID) : 23

### 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

#### 15.1.1. 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 (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### VOC Directive (2004/42)

VOC content : 618 (Cat.II B(e) VOC max 840 g/L)

##### 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 to the relevant national contact point within 24 hours.

Name	CAS-No.	Combined Nomenclature code (CN)	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

Please see [https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives\\_en](https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives_en)

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### Drug Precursors Regulation (273/2004)

Contains no 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)

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Abbreviations and acronyms:	
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	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	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 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

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### Abbreviations and acronyms:

VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

### Full text of H- and 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
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	Repeated exposure may cause skin dryness or cracking.
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
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.
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.
H412	Harmful to aquatic life with long lasting effects.
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
Skin Irrit. 2	Skin corrosion/irritation, Category 2

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### Full text of H- and EUH-statements:

STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

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