

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

### 1.1. Product identifier

Product name Leocril® liquid.  
Product Description Monomer based on Poly Methyl Methacrylate.

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

Identified Use Professional: Monomer for self-curing orthodontic acrylic, either for spray-on or doughing technique. For further information on the utilization, visit our web site: <http://www.leone.it>.  
Uses advised against Mixtures containing unreacted liquid monomer intended to come into contact with skin or nails.

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

Leone s.p.a.  
I – 50019 Sesto Fiorentino – Firenze - Via P. a Quaracchi, 48/50  
e-mail: [research@leone.it](mailto:research@leone.it) – <http://www.leone.it>  
Tel. +39 055.30.44.1 – Fax +39 055 374808.

### 1.4. Emergency telephone number

+39 055.30.44.1. An answering machine is on during closing time.  
[www.leone.it/emergency](http://www.leone.it/emergency) (EU and international telephone numbers).

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

According to Regulation (EC) no.1272/2008 (CLP).

Flammable Liquid Category 2	H225
Skin corrosion / Irritation Category 2	H315
Skin sensitization Category 1	H317
STOT-single exposure Category 3	H335

For full text of H phrases see Section 16.

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction.

### 2.2. Label elements



GHS07

GHS02

Signal word (CLP)	Danger
Hazard statement(s)	<p>methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate, 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester.</p> <p>H225 Highly flammable liquid and vapour.  H315 Causes skin irritation.  H317 May cause an allergic skin reaction.  H335 May cause respiratory irritation.</p>
Precautionary statement(s)	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  P280 Wear protective gloves.  P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  P370+P378 In case of fire: Use foam, dry extinguishing powder, carbon dioxide (CO2) to extinguish.  P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p>

### 2.3. Other hazards

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.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Hazardous ingredients	Product identifier	%W/W	Classification according to Regulation (EC) No. 1272/2008 [CLP]
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit (Note D)	CAS-No.: 80-62-6 EC-No.: 201-297-1 EC Index-No.: 607-035-00-6 REACH-no: 01-2119452498-28	≥ 75	Flammable liquids, Category 2, H225 STOT SE 3, H335 Skin corrosion/irritation, Category 2, H315 Skin sensitisation, Category 1, H317
2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester (Nota D)	CAS-No.: 97-90-5 EC-No.: 202-617-2 EC Index-No.: 607-114-00-5 REACH-no: 01-2119965172-38	1-5	Skin sensitisation, Category 1, H317 STOT SE 3, H335 Hazardous to the aquatic environment Chronic Hazard, Category 3, H412
N,N-dimethyl-p-toluidine (Note C)	CAS-No.: 99-97-8 EC-No.: 202-805-4 EC Index-No.: 612-056-00-9 REACH-no: 01-2119937766-23	0.1-1	Acute toxicity (inhal.), Category 3, H331 Acute toxicity (dermal), Category 3, H311 Acute toxicity (oral), Category 3, H301 STOT RE 2, H373 Hazardous to the aquatic environment Chronic Hazard, Category 3, H412

Specific concentration limits	Product identifier	Specific concentration limits
2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester	CAS-No.: 97-90-5 EC-No.: 202-617-2 EC Index-No.: 607-114-00-5 REACH-no: 01-2119965172-38	(10 ≤ C ≤ 100) STOT SE 3, H335

Note C : Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words "non-stabilised".

For full text of H phrases see Section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation

Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact

Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion

Call a poison center or a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

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

Symptoms/effects after inhalation

May cause respiratory irritation. May cause an allergic skin reaction.

Symptoms/effects after skin contact

Irritation. May cause an allergic skin reaction. Causes skin 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. Sand.

Unsuitable extinguishing Media

Do not use a heavy water stream.

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

Fire hazard	Highly flammable liquid and vapour.
Explosion hazard	May form flammable/explosive vapour-air mixture.
Hazardous decomposition products in case of fire	Toxic fumes may be released.

**5.3. Advice for firefighters**

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

General measures	Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
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**6.1.1. For non-emergency personnel**

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. Evacuate unnecessary personnel.
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**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". Ventilate area.
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Emergency procedures

**6.2. Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

Methods for cleaning up	Take up liquid spill into absorbent material. Collect spillage. Store away from other materials. 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**

Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Additional hazards when processed	Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking.
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**

Technical measures	Ground/bond container and receiving equipment. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical/ventilating/lighting equipment.
Storage conditions	Keep only in the original container in a cool well ventilated place. Keep container tightly closed. Store locked up. Keep in fireproof place.
Incompatible products	Strong bases. Strong acids

Incompatible materials

Sources of ignition. Direct sunlight. Heat sources

### 7.3. Specific end use(s)

No additional information available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)	
<i>EU - Indicative Occupational Exposure Limit (IOEL)</i>	
Local name	Methyl methacrylate
IOEL TWA [ppm]	50 ppm
IOEL STEL [ppm]	100 ppm
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
<i>United Kingdom - Occupational Exposure Limits</i>	
Local name	Methyl methacrylate
WEL TWA (OEL TWA) [1]	208 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	416 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	100 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

#### 8.1.2. Recommended monitoring procedures

No additional information available.

#### 8.1.3. Air contaminants formed

No additional information available.

#### 8.1.4. DNEL and PNEC

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)	
<i>DNEL/DMEL (Workers)</i>	
Acute - local effects, dermal	1,5 mg/cm <sup>2</sup>
Acute - local effects, inhalation	416 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	13.67 mg/kg bodyweight/day
Long-term - local effects, dermal	1.5 mg/cm <sup>2</sup>
Long-term - systemic effects, inhalation	208 mg/m <sup>3</sup>
Long-term - local effects, inhalation	208 mg/m <sup>3</sup>
<i>DNEL/DMEL (General population)</i>	
Acute - local effects, dermal	1.5 mg/cm <sup>2</sup>
Acute - local effects, inhalation	208 mg/m <sup>3</sup>
Long-term - systemic effects, oral	8.2 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	74.3 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	8.2 mg/kg bodyweight/day
Long-term - local effects, dermal	1.5 mg/cm <sup>2</sup>
Long-term - local effects, inhalation	104 mg/m <sup>3</sup>
<i>PNEC (Water)</i>	
PNEC aqua (freshwater)	0.94 mg/l
PNEC aqua (marine water)	0.94 mg/l
PNEC aqua (intermittent, freshwater)	0.94 mg/l
PNEC aqua (intermittent, marine water)	0.94 mg/l
<i>PNEC (Sediment)</i>	
PNEC sediment (freshwater)	5.74 mg/kg dwt
PNEC sediment (marine water)	0.102 mg/kg dwt
<i>PNEC (Soil)</i>	
PNEC soil	1.47 mg/kg dwt
<i>PNEC (STP)</i>	
PNEC sewage treatment plant	10 mg/l

#### 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester (97-90-5)

<i>DNEL/DMEL (Workers)</i>	
Long-term - systemic effects, dermal	1.3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2.45 mg/m <sup>3</sup>
<i>DNEL/DMEL (General population)</i>	
Long-term - systemic effects, oral	0.83
Long-term - systemic effects, inhalation	1.45 mg/m <sup>3</sup>

Long-term - systemic effects, dermal	0.83 mg/kg bodyweight/day
<i>PNEC (Water)</i>	
PNEC aqua (freshwater)	0.139 mg/l
PNEC aqua (marine water)	0.0139 mg/l
PNEC aqua (intermittent, freshwater)	0.15 mg/l
<i>PNEC (Sediment)</i>	
PNEC sediment (freshwater)	1.6 mg/kg dwt
PNEC sediment (marine water)	0.16 mg/kg dwt
<i>PNEC (Soil)</i>	
PNEC soil	0.239 mg/kg dwt
<i>PNEC (STP)</i>	
PNEC sewage treatment plant	57 mg/l

<b>N,N-dimethyl-p-toluidine (99-97-8)</b>	
<i>DNEL/DMEL (Workers)</i>	
Long-term - systemic effects, dermal	0.694167 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1.224 mg/m <sup>3</sup>
<i>DNEL/DMEL (General population)</i>	
Long-term - systemic effects, oral	0.173542 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.301812 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0.292522 mg/kg bodyweight/day
<i>PNEC (Water)</i>	
PNEC aqua (freshwater)	0.0137 – 0.15259 mg/l
PNEC aqua (marine water)	0.00137 – 0.015259 mg/l
PNEC aqua (intermittent, freshwater)	0.0137 – 0.15259 mg/l
<i>PNEC (Sediment)</i>	
PNEC sediment (freshwater)	45.378 – 48.245 mg/kg dwt
PNEC sediment (marine water)	45.378 – 48.245 mg/kg dwt
<i>PNEC (Soil)</i>	
PNEC soil	18.677 – 20.365 mg/kg dwt
<i>PNEC (STP)</i>	
PNEC sewage treatment plant	1.36 – 4.286 mg/l

### 8.1.5. Control banding

No additional information available.

### 8.2. Exposure controls

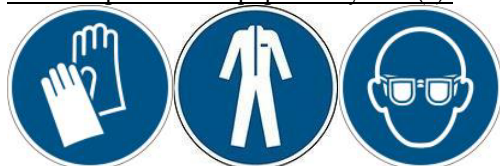
#### 8.2.1. Appropriate engineering controls

Ensure good ventilation of the work station.

#### 8.2.2. Individual protection measures, such as personal protective equipment

Gloves. Protective clothing. Safety glasses. Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



#### Eye and face protection:

Wear eye glasses with side protection according to EN 166.

#### Skin protection:

Wear suitable protective clothing. Standard. EN 13034.

#### Hand protection:

Wear suitable gloves tested to EN374. Recommendation: Wear suitable gloves resistant to chemical penetration. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear. Suitable material: butyl rubber. Layer thickness : 0.3 mm. penetration time (maximum wearing period): 60 min. If there is a risk of liquid being splashed : Nitrile rubber gloves Incidental. Thickness of glove material: 0.11 mm.

#### Respiratory protection

No respiratory protection needed under normal use conditions. When exposure limit values are exceeded: use respirators with filtertype A (organic gases and vapours). Use half masks (approved to EN 405) or full face masks (approved to EN 136).

#### Thermal hazards

No additional information available.

**8.2.3. Environmental exposure controls**

Avoid release to the environment.

**Other information:**

Do not eat, drink or smoke during use.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state	Liquid
Colour	Clear. Colourless.
Odour	Ester. Strong. acid. Characteristic.
Odour threshold	Not available
Melting point	-48 °C
Freezing point	Not available
Boiling point	100.5 °C
Flammability	Highly flammable liquid and vapour
Explosive limits	Not available
Lower explosive limit (LEL)	Not available
Upper explosive limit (UEL)	Not available
Flash point	10 °C
Auto-ignition temperature	421 °C
Decomposition temperature	Not available
pH	Not applicable
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Solubility	Water: 1.6 % slightly soluble Organic solvent: Dispersible
Partition coefficient n-octanol/water (Log Kow)	Not available
Partition coefficient n-octanol/water (Log Pow)	Not applicable
Vapour pressure	3.6 Pa @ 20°C
Vapour pressure at 50 °C	Not available
Density	Not applicable
Relative density	0.94 @ 20°C
Relative vapour density at 20 °C	Not available
Particle size	Not applicable
Particle size distribution	Not applicable
Particle shape	Not applicable
Particle aspect ratio	Not applicable
Particle aggregation state	Not applicable
Particle agglomeration state	Not applicable
Particle specific surface area	Not applicable
Particle dustiness	Not applicable

**9.2. Other information****9.2.1. Information with regard to physical hazard classes**

No additional information available.

**9.2.2. Other safety characteristics**

VOC content	≈ 95 %
Bulk density	Not applicable

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Highly flammable liquid and vapour.

**10.2. Chemical stability**

Stable under normal conditions. Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

**10.3. Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use.

**10.4. Conditions to avoid**

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures. Open flame.

**10.5. Incompatible materials**

Strong acids. Strong bases.

**10.6. Hazardous decomposition products**



Fume. Carbon monoxide. Carbon dioxide. May release flammable gases. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

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

Acute toxicity (oral) Not classified.  
Acute toxicity (dermal) Not classified.  
Acute toxicity (inhalation) Not classified.

<b>methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)</b>	
LD50 oral rat	7900 – 9400 mg/kg
LD50 dermal rabbit	5000 mg/kg
LC50 Inhalation - Rat	29.8 mg/l/4h
<b>2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester (97-90-5)</b>	
LD50 oral rat	8300 ml/kg
LD50 dermal rat	2000 mg/kg
<b>N,N-dimethyl-p-toluidine (99-97-8)</b>	
LD50 oral rat	1650 mg/kg
LD50 oral	139 mg/kg bodyweight Animal: mouse, Guideline: other:
LD50 dermal rabbit	2000 mg/kg
LC50 Inhalation - Rat	1.4 mg/l/4h

Skin corrosion/irritation Causes skin irritation.  
pH: Not applicable  
Serious eye damage/irritation Not classified  
pH: Not applicable  
Additional information Based on available data, the classification criteria are not met  
Respiratory or skin sensitisation May cause an allergic skin reaction.  
Germ cell mutagenicity Not classified  
Additional information Based on available data, the classification criteria are not met  
Carcinogenicity Not classified  
Additional information Based on available data, the classification criteria are not met  
Reproductive toxicity Not classified  
Additional information Based on available data, the classification criteria are not met  
STOT-single exposure May cause respiratory irritation.

<b>methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester (97-90-5)</b>	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposureUlteriori indicazioni Not classified  
Additional information Based on available data, the classification criteria are not met

<b>methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)</b>	
LOAEC (inhalation, rat, vapour, 90 days)	416 mg/m <sup>3</sup> air
NOAEL (oral, rat, 90 days)	124.1 – 164 mg/kg bodyweight/day
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	500 – 1000 ppm
<b>2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester (97-90-5)</b>	
LOAEC (inhalation, rat, gas, 90 days)	350 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (oral, rat, 90 days)	100 – 1500 mg/kg bodyweight/day
<b>N,N-dimethyl-p-toluidine (99-97-8)</b>	
LOAEL (oral, rat, 90 days)	201.786 mg/kg bodyweight/day

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
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Aspiration hazard  
Additional information

Not classified  
Based on available data, the classification criteria are not met

Viscosity, kinematic

No data available.

## 11.2 Information on other hazards

### 11.2.1. Endocrine disrupting properties

No additional information available.

### 11.2.2. Other information

Potential adverse human health effects and symptoms

Based on available data, the classification criteria are not met

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute)

Not classified

Hazardous to the aquatic environment, long-term (chronic)

Not classified

methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)	
LC50 - Fish [1]	79 mg/l
EC50 - Crustacea [1]	69 mg/l
EC50 72h - Algae [1]	110 mg/l
LOEC (chronic)	68 mg/l (21d)
NOEC (acute)	40 mg/l (4d)
NOEC (chronic)	37 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	37 mg/l (21d)
2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester (97-90-5)	
LC50 - Fish [1]	15.95 mg/l
EC50 - Crustacea [1]	44.9 mg/l
EC50 72h - Algae [1]	17.3 mg/l
EC50 96h - Algae [1]	19 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	10.1 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	5.05 mg/l
NOEC chronic fish	5.05 mg/l (21 d)
N,N-dimethyl-p-toluidine (99-97-8)	
LC50 - Fish [1]	45 – 52.8 mg/l
EC50 - Crustacea [1]	13.7 mg/l
EC50 - Other aquatic organisms [1]	42.864 mg/l microorganisms
EC50 72h - Algae [1]	22 – 24.37 mg/l

### 12.2. Persistence and degradability

Not established.

### 12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (Log Pow)

Not applicable

Bioaccumulative potential

Not established.



<b>methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate (80-62-6)</b>	
Partition coefficient n-octanol/water (Log Pow)	1.38 @ 20 °C and pH 7
<b>2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester (97-90-5)</b>	
Bioconcentration factor (BCF REACH)	21.9
Partition coefficient n-octanol/water (Log Pow)	2.4
<b>N,N-dimethyl-p-toluidine (99-97-8)</b>	
Partition coefficient n-octanol/water (Log Pow)	1.729 @ 35 °C and pH 5.6

#### 12.4. Mobility in soil

No additional information available.

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

No additional information available.

#### 12.6 Endocrine disrupting properties

No additional information available.

#### 12.7. Other adverse effects

Additional information Avoid release to the environment.

### SECTION 13: Disposal considerations

Dispose of in accordance with local and national regulations. In Italy dispose of according to Legislative Decree of April 3 2006 no. 152 "Regulations on environmental subject", application of European Directives on environmental protection, and subsequent modifications and integrations including those of Decree-Law No. 153 of 17 October 2024. Avoid release to the environment. Decontaminate empty drums before recycling.

#### 13.1. Waste treatment methods

Regional legislation (waste)

Waste treatment methods

Disposal must be done according to official regulations.

Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations

Dispose in a safe manner in accordance with local/national regulations.

Additional information

Flammable vapours may accumulate in the container. Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials

Avoid release to the environment.

### SECTION 14: Transport information

ADR

#### 14.1 UN number or ID number

UN 1247

#### 14.2 UN proper shipping name

METHYL METHACRYLATE MONOMER, STABILIZED

Transport document description

UN 1247 METHYL METHACRYLATE MONOMER, STABILIZED.

#### 14.3. Transport hazard class(es)

3

#### 14.4 Packing group

II

#### 14.5 Environmental hazards

Dangerous for the environment: No

Dangerous for the environment: No

#### 14.6. Special precautions for user

Overland transport

Classification code (ADR)

F1

Special provisions (ADR)

386

Limited quantities (ADR)

1L

Excepted quantities (ADR)

E2

Packing instructions (ADR)

P001, IBC02, R001

Transport category (ADR)

2

Hazard identification number (Kemler No.)

339

Tunnel restriction code (ADR)

D/E

EAC code

3YE

**Leone current shipping mode (ADR): combination packaging total exemption.**

#### 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**

Regulation (EC) no. 1272/2008 (Classification, labeling and packaging of substances and mixtures) and subsequent amendments, amending and repealing Directive 67/548/EEC and 1999/45/EC, and amending Regulation (EC) no. 1907/2006.

Directive 2009/161/EU (third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC).

This product is CE marked in accordance with the essential safety and performance requirements of Annex I of the European regulation on medical devices.

**15.2. Chemical safety assessment**

A chemical safety assessment has been carried out for Methyl Methacrylate.

**SECTION 16: Other information**

This safety data sheet has been prepared in accordance with REACH Regulation (EC) 1907/2006 as amended by Regulation (EU) 2020/878.

The safety data sheet has been written according to relevant European provisions, on the basis of information received by the supplier of the mixture.

The product is intended for orthodontic and odontological use only. The use of the product has to be restricted to skilled and licensed professionals. The information relates only to specific product designated and is not intended as a warranty of quality.

Leone disclaims any responsibility arising out of the use of the information here furnished, or of the handling, the application or the manufacture of the product here described. The final user is called to verify the application and completeness of the information herein in relationship to the specific use and reliability of the rules and local applicable dispositions.

The present information does not imply any liberty to break patent rights.

Previous safety data sheet no. R01-9E dated 31/01/2023 is to be considered obsolete. In comparison to the preceding revision, meaningful changes have not been effected but only adjustments to the European provisions which regulate the compilation of safety data sheets.

Certain subsections of some sections are omitted because, as permitted by Annex II, Part B of Regulation (EU) 2020/878, they are not applicable.

This safety data sheet is subject to revision. Visit our web site [www.leone.it](http://www.leone.it) for an updated version of the present sheet.

**Hazard statements**

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

**Legend:**

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.

CAS No.: numerical identifier that uniquely identifies a chemical substance, assigned by the Chemical Abstract Service.

CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.

DMEL: Derived Minimal Effect level.

DNEL: Derived-No Effect Level.

EAC: Emergency Action Code. Identifies emergency actions in the event of an accident during the transport of dangerous goods.

EC-Number: EINECS and ELINCS Number (see also EINECS and ELINCS).

EC50: 50 % effective concentration. Corresponds to the concentration of a tested substance capable of causing 50 % effect changes (e.g. on growth) during a specified time interval.

EN: European Standard.

EN 13034: Protective clothing against liquid chemicals.

EN 405: Respiratory protective devices - Valved filtered half masks for protection against gases or gases and particles.

EN 166: Personal eye-protection – Specifications.

EN 136: Respiratory protective devices.

EN 374: Protective gloves against dangerous chemicals and micro-organisms.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IATA : International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

IMO: International Maritime Organization.

LC50: Lethal Concentration 50: lethal concentration of substance for 50% of organisms of a certain population during a certain exposure period.

LD50 Lethal Dose 50: the dose required to kill half the members of a tested population after a specified test duration.

LOAEC: Lowest Observed Adverse Effect Concentration.

LOAEL: Lowest Observed Adverse Effect Level.

LOEC: Lowest Observed Effect 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 And Toxic Substances.

PNEC: Predicted No-Effect Concentration.

Ppm: Parts per Million.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short-Term Exposure Limit.

STOT RE 2: Specific target organ toxicity — Repeated exposure, Category 2.

STOT SE 3: Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation.

TWA: Time-weighted average concentration of a chemical agent in the air within the breathing zone of a worker for an 8-hour working day.

VOC: Volatile Organic Compounds.

vPvB: Very Persistent And Very Bioaccumulative Substances.

WEL: Workplace Exposure Limit.