

**ELMOTHERM® 009-0008 SPRAY**

Version 6.0 SDB\_GB

Revision Date 08.11.2016

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

**1.1 Product identifier**

Trade name : ELMOTHERM® 009-0008 SPRAY

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

Use of the Substance/Mixture : Spray insulating varnish

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

Company : ELANTAS Europe S.r.l.  
Strada Antolini 1  
43044 Collecchio  
Italy  
Telephone : +3907363081  
Telefax : +390736402746  
E-mail address : msds.elantas.europe@altana.com

**1.4 Emergency telephone number**

+39 0736 3081 (8-17 h)

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**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification (REGULATION (EC) No 1272/2008)**

Aerosols , Category 1	H222: Extremely flammable aerosol. H229: Pressurised container: May burst if heated.
Skin irritation , Category 2	H315: Causes skin irritation.
Serious eye damage , Category 1	H318: Causes serious eye damage.
Specific target organ toxicity - single exposure , Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Specific target organ toxicity - single exposure , Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure , Category 2	H373: May cause damage to organs through prolonged or repeated exposure.

**2.2 Label elements**





**Labelling (REGULATION (EC) No 1272/2008)**

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Hazard pictograms	:	   
Signal word	:	Danger
Hazard statements	:	H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	:	<b>Prevention:</b> 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. P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P280 Wear eye protection/ face protection. <b>Response:</b> P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. <b>Storage:</b> P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Hazardous components which must be listed on the label:

Xylene, mixture of isomers

iso-butanol

**Additional Labelling:**

EUH208 Contains: 2-butanone oxime. May produce an allergic reaction.

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.  
Warning! Container under pressure.

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

**3.2 Mixtures**

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Chemical nature : Alkyd Resin Solution

**Hazardous components**

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Xylene, mixture of isomers	1330-20-7 215-535-7 01-2119488216-32	Flam. Liq.3; H226 Acute Tox.4; H332 Acute Tox.4; H312 Skin Irrit.2; H315 Eye Irrit.2; H319 STOT SE3; H335 STOT RE2; H373 Asp. Tox.1; H304	>= 20 - < 25
acetone	67-64-1 200-662-2 01-2119471330-49	Flam. Liq.2; H225 Eye Irrit.2; H319 STOT SE3; H336	>= 12,5 - < 20
hydrocarbons, C3-4	68476-40-4 270-681-9	Flam. Gas1; H220 Press. GasH280	>= 10 - < 12,5
butanone	78-93-3 201-159-0 01-2119457290-43	Flam. Liq.2; H225 Eye Irrit.2; H319 STOT SE3; H336	>= 1 - < 3
iso-butanol	78-83-1 201-148-0 01-2119484609-23	Flam. Liq.3; H226 STOT SE3; H335, H336 Skin Irrit.2; H315 Eye Dam.1; H318	>= 1 - < 3
cyclohexanone	108-94-1 203-631-1 01-2119453616-35	Flam. Liq.3; H226 Acute Tox.4; H332 Acute Tox.4; H312 Acute Tox.4; H302 2; H315 Eye Dam.1; H318	>= 1 - < 3
2-butanone oxime	96-29-7 202-496-6 01-2119539477-28	Carc.2; H351 Acute Tox.4; H312 Eye Dam.1; H318 Skin Sens.1; H317	>= 0,1 - < 0,25
Substances with a workplace exposure limit :			
dimethyl ether	115-10-6 204-065-8	Flam. Gas1; H220 Press. Gas	>= 30 - < 50

For explanation of abbreviations see section 16.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

General advice : Show this safety data sheet to the doctor in attendance.  
Treat symptomatically.  
Consult a physician.  
Do not leave the victim unattended.

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- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.  
Avoid inhalation, ingestion and contact with skin and eyes.
- If inhaled : Move to fresh air.  
If symptoms persist, call a physician.  
Oxygen or artificial respiration if needed.  
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off immediately with plenty of water for at least 15 minutes.  
Use a mild soap if available.  
Wash contaminated clothing before re-use.  
If skin irritation persists, call a physician.
- In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  
Keep eye wide open while rinsing.
- If swallowed : Call a physician immediately.  
Gently wipe or rinse the inside of the mouth with water.  
Do not induce vomiting without medical advice.  
Never give anything by mouth to an unconscious person.

**4.2 Most important symptoms and effects, both acute and delayed**

- Symptoms : Nausea  
Central nervous system depression  
Drowsiness

**4.3 Indication of any immediate medical attention and special treatment needed**

- Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

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**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Keep containers and surroundings cool with water spray.

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

- Specific hazards during firefighting : The pressure in sealed containers can increase under the influence of heat.  
Warning: water promotes the spread of fire.  
Burning produces irritant fumes.  
Exposure to decomposition products may be a hazard to health.

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### 5.3 Advice for firefighters

- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.
- Further information : Cool containers/tanks with water spray.  
Keep away from heat and sources of ignition.  
Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## SECTION 6: Accidental release measures

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

- Personal precautions : Ensure adequate ventilation.  
Keep people away from and upwind of spill/leak.  
Refer to protective measures listed in sections 7 and 8.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
Remove all sources of ignition.

### 6.2 Environmental precautions

- Environmental precautions : Do not allow material to contaminate ground water system.  
Prevent product from entering drains.  
Local authorities should be advised if significant spillages cannot be contained.

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

- Methods for cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).  
Sweep up and shovel into suitable containers for disposal.  
Clean contaminated surface thoroughly.

### 6.4 Reference to other sections

- For personal protection see section 8.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Advice on safe handling : Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.  
Do not spray on a naked flame or any incandescent material.  
Keep away from sources of ignition - No smoking. Keep away from children.  
Operate if possible out of doors or in a well-ventilated place.
- Advice on protection against : Use only in area provided with appropriate exhaust ventilation.

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fire and explosion

Hygiene measures : Store personal protection equipment in a clean location away from the work area. Keep working clothes separately.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage : Keep containers tightly closed in a dry, cool and well-ventilated place.

**7.3 Specific end use(s)**

Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

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

**8.1 Control parameters**

**Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
dimethyl ether	115-10-6	TWA	1.000 ppm 1.920 mg/m3	2000/39/EC
Further information	Indicative			
		TWA	400 ppm 766 mg/m3	GB EH40
		STEL	500 ppm 958 mg/m3	GB EH40
Xylene, mixture of isomers	1330-20-7	TWA	50 ppm 220 mg/m3	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	100 ppm 441 mg/m3	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		TWA	50 ppm 221 mg/m3	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	100 ppm 442 mg/m3	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
acetone	67-64-1	TWA	500 ppm 1.210 mg/m3	2000/39/EC
Further information	Indicative			
		TWA	500 ppm 1.210 mg/m3	GB EH40
		STEL	1.500 ppm 3.620 mg/m3	GB EH40
butanone	78-93-3	TWA	200 ppm 600 mg/m3	2000/39/EC
Further information	Indicative			

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		STEL	300 ppm 900 mg/m3	2000/39/EC
Further information	Indicative			
		TWA	200 ppm 600 mg/m3	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	300 ppm 899 mg/m3	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
iso-butanol	78-83-1	TWA	50 ppm 154 mg/m3	GB EH40
		STEL	75 ppm 231 mg/m3	GB EH40
cyclohexanone	108-94-1	TWA	10 ppm 40,8 mg/m3	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	20 ppm 81,6 mg/m3	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	10 ppm	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	20 ppm	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			

**Biological occupational exposure limits**

Substance name	CAS-No.	Control parameters	Sampling time	Basis
Xylene	1330-20-7	methyl hippuric acid: 650 mmol/mol creatinine (Urine)	After shift	GB EH40 BAT
Methylethyl ketone	78-93-3	butan-2-one: 70 micromol per litre (Urine)	After shift	GB EH40 BAT
Cyclohexanone	108-94-1	cyclohexanol: 2 mmol/mol creatinine (Urine)	After shift	GB EH40 BAT

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

Xylene, mixture of isomers : End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Acute effects, Short-term exposure, Systemic effects  
Value: 289 mg/m3  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Acute effects, Short-term exposure, Local effects  
Value: 289 mg/m3  
End Use: Workers  
Exposure routes: Skin contact  
Potential health effects: Long-term exposure, Systemic effects

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Value: 180 mg/kg  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term exposure, Systemic effects  
Value: 77 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Short-term exposure, Systemic effects  
Value: 174 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Short-term exposure, Local effects  
Value: 174 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Skin contact  
Potential health effects: Long-term exposure, Systemic effects  
Value: 108 mg/kg  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: Long-term exposure, Systemic effects  
Value: 1,6 mg/kg  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Long-term exposure, Systemic effects  
Value: 14,8 mg/m<sup>3</sup>  
acetone : End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Acute local effects  
Value: 2420 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term exposure  
Value: 1210 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Skin contact  
Potential health effects: Long-term exposure  
Value: 186 mg/kg  
End Use: Consumers  
Exposure routes: Skin contact  
Potential health effects: Long-term exposure  
Value: 62 mg/kg  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Long-term exposure  
Value: 200 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: Long-term exposure  
Value: 62 mg/kg  
butanone : End Use: Workers  
Exposure routes: Skin contact  
Potential health effects: Long-term systemic effects  
Value: 1161 mg/kg  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects



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Value: 600 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Skin contact  
Potential health effects: Long-term systemic effects

Value: 412 mg/kg  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects

Value: 106 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: Long-term systemic effects

Value: 31 mg/kg  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term local effects

Value: 310 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: Long-term systemic effects

Value: 25 mg/kg  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Long-term local effects

Value: 55 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Short-term exposure, Systemic effects

Value: 80 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Skin contact  
Potential health effects: Short-term exposure, Systemic effects

Value: 4 mg/kg  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Short-term exposure, Local effects

Value: 80 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Skin contact  
Potential health effects: Long-term exposure, Systemic effects

Value: 4 mg/kg  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term exposure, Systemic effects

Value: 40 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term exposure, Local effects

Value: 40 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Skin contact  
Potential health effects: Short-term exposure, Systemic effects

Value: 1 mg/kg  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Short-term exposure, Systemic effects

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Value: 20 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: Short-term exposure, Systemic effects  
Value: 1,5 mg/kg  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Short-term exposure, Local effects  
Value: 40 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Skin contact  
Potential health effects: Long-term exposure, Systemic effects  
Value: 1 mg/kg  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Long-term exposure, Systemic effects  
Value: 10 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: Long-term exposure, Systemic effects  
Value: 1,5 mg/kg  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Local effects  
Value: 20 mg/m<sup>3</sup>

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Xylene, mixture of isomers : Fresh water  
Value: 0,327 mg/l  
Marine water  
Value: 0,327 mg/l  
Fresh water sediment  
Value: 12,46 mg/kg  
Marine sediment  
Value: 12,46 mg/kg  
Soil  
Value: 2,31 mg/kg  
Sewage treatment plant  
Value: 6,58 mg/l  
Intermittent releases  
Value: 0,327 mg/l

acetone : Fresh water  
Value: 10,6 mg/l  
Marine water  
Value: 1,06 mg/l  
Fresh water sediment  
Value: 30,4 mg/kg  
Marine sediment  
Value: 3,04 mg/kg  
Soil  
Value: 29,5 mg/kg  
Intermittent releases  
Value: 21 mg/l  
Sewage treatment plant  
Value: 19,5 mg/l

butanone : Fresh water sediment

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		Value: 284,74 mg/kg
		Marine sediment
		Value: 2847 mg/kg
		Soil
		Value: 22,5 mg/kg
		Oral
		Value: 1000 mg/kg
		Fresh water
		Value: 55,8 mg/l
		Intermittent releases
		Value: 55,8 mg/l
		Sewage treatment plant
		Value: 709 mg/l
iso-butanol	:	Fresh water
		Value: 0,4 mg/l
		Marine water
		Value: 0,04 mg/l
		Fresh water sediment
		Value: 1,52 mg/kg
		Marine sediment
		Value: 0,152 mg/kg
		Soil
		Value: 0,0699 mg/kg
		Sewage treatment plant
		Value: 10 mg/l
		Intermittent releases
		Value: 11 mg/l
cyclohexanone	:	Fresh water
		Value: 0,0329 mg/l
		Marine water
		Value: 0,0329 mg/l
		Fresh water sediment
		Value: 0,0951 mg/kg
		Marine sediment
		Value: 0,0512 mg/kg
		Soil
		Value: 0,0143 mg/kg
		Sewage treatment plant
		Value: 10 mg/l
		Intermittent releases
		Value: 1 mg/l

### 8.2 Exposure controls

#### Personal protective equipment

Eye protection	:	Safety glasses with side-shields conforming to EN166
Hand protection	:	
Material	:	Solvent-resistant gloves (butyl-rubber)
Respiratory protection	:	Respirator with a vapour filter (EN 141)
Filter type	:	Type A (A)
Protective measures	:	Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	: aerosol
Colour	: clear
Odour	: characteristic
pH	: Not applicable
Melting point/freezing point	: lower -15 °C
Initial boiling point	: 35 °C
Flash point	: -1 °C
Flammability (solid, gas)	: Extremely flammable aerosol.
Vapour pressure	: No data available
Relative vapour density	: lower 1(Air = 1.0)
Density	: 0,769 g/cm <sup>3</sup>
Bulk density	: Not applicable
Partition coefficient: n-octanol/water	: No data available

### 9.2 Other information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended storage conditions.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

### 10.4 Conditions to avoid

Conditions to avoid : Keep away from open flames, hot surfaces and sources of ignition.

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**10.5 Incompatible materials**

Materials to avoid : Strong acids and strong bases  
Strong oxidizing agents  
Strong reducing agents

**10.6 Hazardous decomposition products**

Hazardous decomposition products : Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

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**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity**

**Product:**

Acute oral toxicity : Acute toxicity estimate : > 2.000 mg/kg  
Method: Calculation method

Remarks: see also section 2.1

Acute inhalation toxicity : Acute toxicity estimate : > 20 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: Calculation method

Remarks: see also section 2.1

Acute dermal toxicity : Acute toxicity estimate : > 2.000 mg/kg  
Method: Calculation method

Remarks: see also section 2.1

Acute toxicity (other routes of administration) :  
Remarks: see also section 2.1

**Components:**

**Xylene, mixture of isomers:**

Acute oral toxicity : LD50 (Rat, male): 3.523 mg/kg  
Method: Directive 67/548/EEC, Annex V, B.1.

**butanone:**

Acute oral toxicity : LD50 (Rat, male and female): > 2.000 mg/kg  
Method: OECD Test Guideline 423  
GLP: yes

**iso-butanol:**

Acute oral toxicity : LD50 (Rat, male): > 2.830 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

Acute dermal toxicity : LD50 (Rabbit, male): > 2.000 mg/kg

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Method: OECD Test Guideline 402  
GLP: yes

**cyclohexanone:**

Acute oral toxicity : LD50 (Rat): 1.890 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 6,2 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour

**Skin corrosion/irritation**

**Product:**

Remarks: No data available

**Components:**

**butanone:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: No skin irritation  
GLP: yes

**iso-butanol:**

Species: Rabbit  
Result: Skin irritation

**cyclohexanone:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: Skin irritation  
GLP: yes

**Serious eye damage/eye irritation**

**Product:**

Remarks: No data available

**Components:**

**acetone:**

Species: Rabbit  
Method: OECD Test Guideline 405  
Result: Eye irritation

**iso-butanol:**

Species: Rabbit  
Method: OECD Test Guideline 405  
Result: Eye irritation  
GLP: yes

**cyclohexanone:**

Species: Rabbit  
Method: OECD Test Guideline 405  
Result: Risk of serious damage to eyes.

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GLP: yes

**Respiratory or skin sensitisation**

**Product:**

Remarks: No data available

**Components:**

**butanone:**

Test Type: Buehler Test  
Exposure routes: Dermal  
Species: Guinea pig  
Method: OECD Test Guideline 406  
Result: Does not cause skin sensitisation.  
GLP: yes

**iso-butanol:**

Test Type: Maximisation Test  
Exposure routes: Dermal  
Species: Guinea pig  
Method: OECD Test Guideline 406  
Result: Does not cause skin sensitisation.

**Germ cell mutagenicity**

**Carcinogenicity**

**Reproductive toxicity**

**STOT - single exposure**

**STOT - repeated exposure**

**Repeated dose toxicity**

**Product:**

Remarks: No data available

**Aspiration toxicity**

**Components:**

**acetone:**

No aspiration toxicity classification

**iso-butanol:**

No aspiration toxicity classification

**Further information**

**Product:**

Remarks: No data available

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**SECTION 12: Ecological information**

**12.1 Toxicity**

**Product:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

**Components:**

**Xylene, mixture of isomers:**

Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 2,2 mg/l  
Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201  
GLP: yes

**butanone:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 2.993 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 308 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202  
GLP: yes

Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 2.029 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 201  
GLP: yes

**iso-butanol:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 1.430 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 1.100 mg/l  
Exposure time: 48 h  
Test Type: static test

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 1.799 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : NOEC: 20 mg/l  
Exposure time: 21 d



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(Chronic toxicity)

End point: Reproduction  
Species: Daphnia magna (Water flea)  
Test Type: semi-static test

**cyclohexanone:**

Toxicity to algae

: ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l  
Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201  
GLP: yes

**12.2 Persistence and degradability**

**Product:**

Biodegradability : Remarks: No data available

**Components:**

**Xylene, mixture of isomers:**

Biodegradability : Test Type: aerobic  
Result: Readily biodegradable.  
Method: OECD Test Guideline 301F  
GLP: yes

**butanone:**

Biodegradability : Test Type: aerobic  
Result: Readily biodegradable.  
Method: OECD Test Guideline 301D  
GLP: yes

**iso-butanol:**

Biodegradability : Result: Readily biodegradable.  
Method: OECD Test Guideline 301D

**12.3 Bioaccumulative potential**

**Product:**

Bioaccumulation : Remarks: No data available

**Components:**

**butanone:**

Partition coefficient: n-octanol/water : log Pow: 0,3 (40 °C)  
pH: 7  
Method: OECD Test Guideline 117  
GLP: yes

**iso-butanol:**

Partition coefficient: n-octanol/water : log Pow: 1  
Method: OECD Test Guideline 117  
GLP: yes

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**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

**12.6 Other adverse effects**

No data available

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**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

Product : Dispose of in accordance with the European Directives on waste and hazardous waste.  
Do not dispose of with domestic refuse.  
Container hazardous when empty.  
The product should not be allowed to enter drains, water courses or the soil.  
Can be incinerated, when in compliance with local regulations.

Contaminated packaging : Offer empty spray cans to an established disposal company.

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**SECTION 14: Transport information**

**14.1 UN number**

ADR/RID/ADN : UN 1950  
IMDG : UN 1950  
IATA : UN 1950

**14.2 UN proper shipping name**

ADR/RID/ADN : AEROSOLS  
IMDG : AEROSOLS  
IATA : Aerosols, flammable

**14.3 Transport hazard class(es)**

ADR/RID/ADN : 2.1  
IMDG : 2.1  
IATA : 2.1

**14.4 Packing group**

ADR/RID/ADN  
Packing group : Not assigned by regulation

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Hazard Identification Number : 23  
Labels : 2.1

**IMDG**

Packing group : Not assigned by regulation  
Labels : 2.1  
EmS Code : F-D, S-U  
Remarks : IMDG Code segregation group - none

**IATA**

Packing instruction (cargo aircraft) : 203  
Packing instruction (passenger aircraft) : 203  
Packing group : Not assigned by regulation  
Labels : 2.1

**14.5 Environmental hazards**

**ADR/RID/ADN**

Environmentally hazardous : no

**IMDG**

Marine pollutant : no

**14.6 Special precautions for user**

Not applicable

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

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**SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : dimethyl ether  
Xylene, mixture of isomers  
hydrocarbons, C3-4  
butanone  
iso-butanol

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
P3a	FLAMMABLE AEROSOLS	150 t	500 t

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according to Regulation (EC) No. 1907/2006



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### 15.2 Chemical safety assessment

Not applicable

## SECTION 16: Other information

### Full text of H-Statements

H220	: Extremely flammable gas.
H225	: Highly flammable liquid and vapour.
H226	: Flammable liquid and vapour.
H280	: Contains gas under pressure; may explode if heated.
H302	: Harmful if swallowed.
H304	: May be fatal if swallowed and enters airways.
H312	: Harmful in contact with skin.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H335	: May cause respiratory irritation.
H336	: May cause drowsiness or dizziness.
H351	: Suspected of causing cancer.
H373	: May cause damage to organs through prolonged or repeated exposure.

### Full text of other abbreviations

Acute Tox.	: Acute toxicity
Asp. Tox.	: Aspiration hazard
Carc.	: Carcinogenicity
Eye Dam.	: Serious eye damage
Eye Irrit.	: Eye irritation
Flam. Gas	: Flammable gases
Flam. Liq.	: Flammable liquids
Press. Gas	: Gases under pressure
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation
STOT RE	: Specific target organ toxicity - repeated exposure
STOT SE	: Specific target organ toxicity - single exposure

### Further information

Training advice	: Provide adequate information, instruction and training for operators.
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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.