

## SAFETY DATA SHEET

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. PRODUCT IDENTIFIER

Product name

**MITOSOL 4001**



chemius.net/nh9aa

#### 1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Relevant identified uses

Adhesive for industrial use.

Uses advised against

Do not use for purposes other than those listed.

#### 1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Supplier

MITOL, tovarna lepil, d.o.o., Sežana

Address: Partizanska c. 78 Sežana, Slovenia

Phone: +386 5 73 12 300

Fax: +386 5 73 12 390

E-mail: lilijana.kocjan@mitol.si

Point of contact for safety info: Lilijana Kocjan Žorž

#### 1.4. EMERGENCY TELEPHONE NUMBER

112

+386 5 73 12 300 (8:00-16:00)

### SECTION 2. HAZARDS IDENTIFICATION

#### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification according to Regulation (EC) No 1272/2008 (CLP)

Flam. Liq. 2; H225 Highly flammable liquid and vapour.

Asp. Tox. 1; H304 May be fatal if swallowed and enters airways.

Skin Sens. 1; H317 May cause an allergic skin reaction.

STOT SE 3; H336 May cause drowsiness or dizziness.

Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

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### 2.2 LABEL ELEMENTS

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



Signal word: **Danger**

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P243 Take action to prevent static discharges.

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

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P331 Do NOT induce vomiting.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

P403 + P235 Store in a well-ventilated place. Keep cool.

#### 2.2.2. Contains:

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane  
colophonium

Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6))

#### 2.2.3. Special provisions

Special hazards are not known or expected.

### 2.3. OTHER HAZARDS

No information.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. SUBSTANCES

For mixtures see 3.2.

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### 3.2. MIXTURES

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	- - -	50-=<75	Flam. Liq. 2; H225 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411		01-2119486291-36
colophonium	8050-09-7 232-475-7 650-015-00-7	20-=<30	Skin Sens. 1; H317		-
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) [C]	- - 601-007-00-7	5=<10	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411		-
acetone	67-64-1 200-662-2 606-001-00-8	5=<10	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066		-
toluene	108-88-3 203-625-9 601-021-00-3	0,1-=<1	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Repr. 2; H361d STOT RE 2; H373		01-2119471310-51

Notes for substances:

- 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.

## SECTION 4. FIRST AID MEASURES

### 4.1. DESCRIPTION OF FIRST AID MEASURES

#### General notes

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency.

#### Following inhalation

Ventilate the premises. Remove patient to fresh air - move out of dangerous area. If symptoms develop and persist, seek medical attention.

#### Following skin contact

Take off all contaminated clothing. Wash affected skin areas thoroughly with plenty of water and soap. If symptoms develop and persist, seek medical attention. Wash contaminated clothes and shoes before reuse.

#### Following eye contact

Do not apply any medicating agents or ointment of any kind before obtaining an advice from an ophthalmologist.

#### Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. Consult a physician. Show the physician the safety data sheet or label.

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### 4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

#### Inhalation

Vapours may cause drowsiness and dizziness.

#### Skin contact

May cause sensitisation by skin contact (symptoms: itching, redness, rashes).

Repeated exposure may cause dry skin or cracked skin.

#### Eye contact

Contact with eyes can cause irritation (redness, tearing, pain).

#### Ingestion

Harmful: may cause lung damage if swallowed.

May cause nausea/vomiting and diarrhea.

### 4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

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## SECTION 5. FIREFIGHTING MEASURES

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### 5.1. EXTINGUISHING MEDIA

#### Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

#### Unsuitable extinguishing media

Full water jet.

### 5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

#### Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>).

### 5.3. ADVICE FOR FIREFIGHTERS

#### Protective actions

In case of fire do not breathe fumes/gases. In case of fire evacuate the area. Use water to cool exposed surfaces and to protect the firefighters. Cool containers at risk with water spray. If possible remove containers from endangered area.

#### Special protective equipment for firefighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

#### Additional information

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

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### 6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

#### 6.1.1. For non-emergency personnel

##### **Protective equipment**

Use personal protective equipment (Section 8). Wear suitable protective face mask, protective gloves and clothing.

##### **Emergency procedures**

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking! Prevent access to unprotected personnel. Prevent access to unauthorised personnel. Evacuate the danger zone. Do not use open fire and keep away all sources of ignition.

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### 6.1.2. For emergency responders

Use personal protective equipment. Ensure adequate ventilation.

### **6.2. ENVIRONMENTAL PRECAUTIONS**

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

### **6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP**

#### 6.3.1. For containment

Dam the spillage.

#### 6.3.2. For cleaning up

Stop leak if without risk. Recover the product while wearing a mask and protective clothing. Recover the product for reuse, if possible, or for removal. Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Prevent product to reach water bodies or sewage systems. Remnant rinse away with plenty of water. Collect and dispose of contaminated washing water.

#### 6.3.3. Other information

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### **6.4. REFERENCE TO OTHER SECTIONS**

See also Sections 8 and 13.

## SECTION 7. HANDLING AND STORAGE

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### **7.1. PRECAUTIONS FOR SAFE HANDLING**

#### 7.1.1. Protective measures

##### **Measures to prevent fire**

Ensure adequate ventilation. Keep away from sources of ignition - no smoking. Use spark-proof tools. Take precautionary measures against static discharges. Protect from open fire and other sources of ignition or heat.

##### **Measures to prevent aerosol and dust generation**

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##### **Measures to protect the environment**

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#### 7.1.2. Advice on general occupational hygiene

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin and eyes. Do not breathe vapours/mist.

### **7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

#### 7.2.1. Technical measures and storage conditions

Keep in tightly closed container. Keep in cool and well ventilated area. Keep away from open fire, heat, sparks and direct sunlight. Take precautionary measures against static discharges. Keep away from food, drink and animal feeding stuffs.

#### 7.2.2. Packaging materials

The original container of producer.

#### 7.2.3. Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

#### 7.2.4. Storage class

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#### 7.2.5. Further information on storage conditions

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### 7.3. SPECIFIC END USE(S)

#### Recommendations

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#### Industrial sector specific solutions

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. CONTROL PARAMETERS

#### 8.1.1. Occupational exposure limit values

Name (CAS)	Limit values		Short-term exposure limit		Remarks	Biological Tolerance Values
	ml/m <sup>3</sup> (ppm)	mg/m <sup>3</sup>	ml/m <sup>3</sup> (ppm)	mg/m <sup>3</sup>		
Rosin-based solder flux fume (8050-09-7)		0,05		0,15	Sen	
Acetone (67-64-1)	500	1210	1500	3620		
Toluene (108-88-3)	50	191	100	384	Sk	
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)		5			mineral oil; TWA 8 hours; inhalable fraction.	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)		5			mineral oil; TWA 8 hours; inhalable fraction.	

#### 8.1.2. Information on monitoring procedures

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

#### 8.1.3. DNEL/DMEL values

##### For components

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Name	Type	Exposure route	Exposure frequency	Value	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	Worker	dermal	long term (systemic effects)	13964 mg/kg bw/day	
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	Worker	inhalation	long term (systemic effects)	5306 mg/m <sup>3</sup>	
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	Consumer	dermal	long term (systemic effects)	1377 mg/kg bw/day	
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	Consumer	inhalation	long term (systemic effects)	1137 mg/m <sup>3</sup>	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	Worker	dermal	long term (systemic effects)	13694 mg/kg bw/day	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	Worker	inhalation	long term (systemic effects)	5306 mg/m <sup>3</sup>	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	Consumer	dermal	long term (systemic effects)	1377 mg/kg bw/day	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	Consumer	inhalation	long term (systemic effects)	1137 mg/m <sup>3</sup>	
acetone (67-64-1)	Worker	dermal	long term ()	186 mg/kg bw/day	
acetone (67-64-1)	Worker	inhalation	short term ()	2420 mg/m <sup>3</sup>	
acetone (67-64-1)	Consumer	oral	long term ()	62 mg/kg bw/day	
acetone (67-64-1)	Consumer	dermal	long term ()	62 mg/kg bw/day	
acetone (67-64-1)	Consumer	inhalation	long term ()	200 mg/m <sup>3</sup>	
toluene (108-88-3)	Worker	inhalation	short term (systemic effects)	384 mg/m <sup>3</sup>	
toluene (108-88-3)	Worker	inhalation	short term (local effects)	384 mg/m <sup>3</sup>	
toluene (108-88-3)	Worker	inhalation	long term (systemic effects)	192 mg/m <sup>3</sup>	
toluene (108-88-3)	Worker	dermal	long term (systemic effects)	384 mg/m <sup>3</sup>	
toluene (108-88-3)	Worker	inhalation	long term (local effects)	192 mg/m <sup>3</sup>	

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### 8.1.4. PNEC values

#### For components

Name	Exposure route	Value	Remark
acetone (67-64-1)	marine water	1,06 mg/L	
acetone (67-64-1)	fresh water	10,6 mg/L	
acetone (67-64-1)	fresh water sediment	30,4 mg/kg	
acetone (67-64-1)	marine water sediment	3,04 mg/kg	
acetone (67-64-1)	soil	0,112 mg/kg	
acetone (67-64-1)	water treatment plant	29,5 mg/L	
acetone (67-64-1)	water, intermittent release	21 mg/L	
toluene (108-88-3)	fresh water	0,68 mg/L	
toluene (108-88-3)	marine water	0,68 mg/L	
toluene (108-88-3)	fresh water sediment	16,36 mg/kg	dry weight
toluene (108-88-3)	marine water sediment	16,36 mg/kg	dry weight
toluene (108-88-3)	soil	2,89 mg/kg	dry weight
toluene (108-88-3)	water treatment plant	13,61 mg/L	

### 8.2. EXPOSURE CONTROLS

#### 8.2.1. Appropriate engineering control

##### Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Avoid contact with eyes and skin. Do not breathe vapours/aerosols. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke while working. Keep away from direct sun-light or other heat sources and sources of ignition.

##### Organisational measures to prevent exposure

Remove all sources of ignition, prevent the build-up of static electricity and prevent the formation of sparks. Keep eyewash bottles or personal eyewash units and emergency showers available.

##### Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

#### 8.2.2. Personal protective equipment

##### Eye and face protection

Safety glasses with side protection (EN 166).

##### Hand protection

Protective gloves (EN 374). EN 420:2003+A1:2009: Protective gloves - General requirements and test methods. Observe the manufacturer's instructions regarding the use, storage, maintenance and replacement of gloves. In case of damage or at the first signs of wear and tear, change the gloves immediately.

##### Appropriate materials

Material	Thickness	Penetration Time	Remark
Nitrile	0,55 mm	480 min	EN 374-4
Butyl rubber	0,5 mm	480 min	EN 374-4
Viton (fluorinated rubber)		480 min	EN 374-4
PVA		480 min	EN 374-4
Nitrile	0,38 mm	60 min	Short term use: EN 374-2
Neoprene	0,75 mm	60 min	Short term use: EN 374-2
chloroprene rubber	0,75 mm	60 min	Short term use: EN 374-2



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### Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345:2011). Working clothes made of antistatic material. Safety Shoes (BS EN ISO 20345:2011, BS EN ISO 20347:2012).

### Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387). Filter type AX, brown color (EN 371). Filter type AX-P2. For dust/gas/ vapor concentrations above the applicable filter limit, in case of oxygen concentrations below 17% or in vague conditions, autonomous self-contained breathing apparatus should be used, according to standard EN 137, EN 138.

### Thermal hazards

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### 8.2.3. Environmental exposure controls

#### Technical measures to prevent exposure

Do not allow product to reach drains, sewage systems or ground water.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

-	<b>Physical state:</b>	liquid
-	<b>Colour:</b>	light yellow
-	<b>Odour:</b>	oily

### Important health, safety and environmental information

-	<b>pH</b>	No information.
-	<b>Melting point/freezing point</b>	> 0 °C
-	<b>Initial boiling point/boiling range</b>	56 °C
-	<b>Flash point</b>	-23 – 0 °C (ASTM D92)
-	<b>Evaporation rate</b>	No information.
-	<b>Flammability (solid, gas)</b>	No information.
-	<b>Explosion limits (vol%)</b>	No information.
-	<b>Vapour pressure</b>	No information.
-	<b>Vapour density</b>	> 2 (air=1)
-	<b>Density</b>	<b>Relative density:</b> 0,75 – 0,85
-	<b>Solubility</b>	<b>Water:</b> Partially soluble <b>Organic solvent:</b> Soluble
-	<b>Partition coefficient</b>	No information.
-	<b>Auto-ignition temperature</b>	No information.
-	<b>Decomposition temperature</b>	No information.
-	<b>Viscosity</b>	<b>Dynamic:</b> 220 – 260 mPas
-	<b>Explosive properties</b>	No information.
-	<b>Oxidising properties</b>	No information.
-	<b>Particle characteristics</b>	No information.

### 9.2. OTHER INFORMATION

-	<b>Remarks:</b>	
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### SECTION 10. STABILITY AND REACTIVITY

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#### 10.1. REACTIVITY

Acetone reacts with certain bases.

#### 10.2. CHEMICAL STABILITY

Product is stable under normal conditions of use, recommended handling and storage conditions.

#### 10.3. POSSIBILITY OF HAZARDOUS REACTIONS

The product is stable under recommended storage and handling conditions.

#### 10.4. CONDITIONS TO AVOID

Protect from heat, direct sunlight, open fire, sparks. Take precautionary measures against static discharges.

#### 10.5. INCOMPATIBLE MATERIALS

Strong oxidising agents.

Strong acids.

Strong bases. Strong reducing agents.

#### 10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released. Carbon dioxide; Carbon monoxide. Various forms of hydrocarbons.

### SECTION 11. TOXICOLOGICAL INFORMATION

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#### 11.1. INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) NO 1272/2008

(a) Acute toxicity

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Name	Exposure route	Type	Species	Time	Value	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	inhalation	-				OECD 403	not toxic
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	oral	-				OECD 402	not toxic
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	inhalation	-				OECD 403	low acute toxicity
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	dermal	-				OECD 402	low acute toxicity
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	oral	LD <sub>50</sub>	rat		5000 mg/kg bw		
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	dermal	LD <sub>50</sub>	rat		3000 mg/kg bw		
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	dermal	LD <sub>50</sub>	rabbit		3000 mg/kg bw		
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	inhalation	LD <sub>50</sub>	rat	4 h	20 mg/l		vapours
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	inhalation	LC <sub>50</sub>	rat	4 h	20 ppmV		gas
acetone (67-64-1)	oral	LD <sub>50</sub>	rat		5800 mg/kg bw		
acetone (67-64-1)	dermal	LD <sub>50</sub>	rat		15800 mg/kg bw		
acetone (67-64-1)	dermal	LD <sub>50</sub>	rabbit		15800 mg/kg bw		
acetone (67-64-1)	inhalation	LC <sub>50</sub>	rat	4 h	76 mg/l		vapours
acetone (67-64-1)	inhalation	LC <sub>50</sub>	rat	4 h	76 ppmV		gas
toluene (108-88-3)	oral	LD <sub>50</sub>	rat		5580 mg/kg bw		
toluene (108-88-3)	dermal	LD <sub>50</sub>	rat		5000 mg/kg bw		
toluene (108-88-3)	dermal	LD <sub>50</sub>	rabbit		5000 mg/kg bw		
toluene (108-88-3)	inhalation	LC <sub>50</sub>	rat	4 h	28,1 mg/l		vapours
toluene (108-88-3)	inhalation	LC <sub>50</sub>	rat	4 h	28,1 ppmV		gas

## (b) Skin corrosion/irritation

Name	Species	Time	Result	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)			Mild irritating.	OECD 404	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)			Mild irritating.	OECD 404	
toluene (108-88-3)			can cause irritation, dryness and cracking of the skin.		

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## (c) Serious eye damage/irritation

Name	Species	Time	Result	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)			Redness		
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)			Mild irritating.	OECD 405, GLP	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)			Mild irritating.	OECD 405, GLP	
acetone (67-64-1)			Severe irritation.	OECD 405, GLP	
acetone (67-64-1)			redness, pain, blurred vision, possible corneal damage		
toluene (108-88-3)			Irritating.		
toluene (108-88-3)			Redness		

## (d) Respiratory or skin sensitisation

Name	Exposure route	Species	Time	Result	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	dermal			Non sensitising.	OECD 429	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	inhalation			Non sensitising.		
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	dermal			Non sensitising.	OECD 429	

**Additional information:** May cause an allergic skin reaction.

## (e) (Germ cell) mutagenicity

Name	Type	Species	Time	Result	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)				Non-mutagenic.	OECD 413	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)				Not mutagenic.	OECD 471, OECD 479, OECD 475	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)				Not mutagenic.	OECD 473	
acetone (67-64-1)				Not mutagenic.	OECD 471 (EU B. 12/13)	
acetone (67-64-1)				Not mutagenic.	OECD 473	
acetone (67-64-1)				Not mutagenic.	OECD 476	
toluene (108-88-3)				Not mutagenic.		

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## (f) Carcinogenicity

Name	Exposure route	Type	Species	Time	Value	Result	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)						Not carcinogenic.	OECD 451	
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)						Not carcinogenic.	OECD 451	
toluene (108-88-3)						Not carcinogenic.		

## (g) Reproductive toxicity

Name	Reproductive toxicity type	Type	Species	Time	Value	Result	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)						it is assumed that it is a reproductive toxicant	OECD 414, 416	
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)		-				it is assumed that it is harmful to breast-fed infants		
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)						The chemical is not classified as toxic for reproduction.	OECD 414, 416	
acetone (67-64-1)	Reproductive toxicity					No effect	OECD 414	
toluene (108-88-3)						Studies with mice showed no effect on reproductive performance		
toluene (108-88-3)						May cause damage to the unborn child.		
toluene (108-88-3)						Animal tests show the possibility that this substance possibly causes toxicity to human reproduction or development		

## Summary of evaluation of the CMR properties

No information.

# SAFETY DATA SHEET

## (h) STOT-single exposure

Name	Exposure route	Type	Species	Time	Organ	Value	Result	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	inhalation	-			central nervous system		May cause effects on the central nervous system. May cause attenuation of vigilance.		
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	inhalation	-			central nervous system		vertigo, drowsiness		
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	oral	-					Nausea		
colophonium (8050-09-7)	inhalation	-					dyspnea		
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	inhalation	-			central nervous system		Drowsiness, dizziness		
acetone (67-64-1)	inhalation	-					sore throat, cough, state of confusion, headaches, vertigo, drowsiness, state of unconsciousness		
acetone (67-64-1)	oral	-					Symptoms: nausea, vomiting.		
acetone (67-64-1)	oral	-					sore throat, cough, state of confusion, headaches, vertigo, drowsiness, state of unconsciousness		
acetone (67-64-1)	inhalation						Irritates respiratory system.		
toluene (108-88-3)	inhalation	-			central nervous system		Drowsiness, dizziness		
toluene (108-88-3)	inhalation	-					Exposure at high levels may result in cardiac arrhythmia and unconsciousness		
toluene (108-88-3)	inhalation	-					sore throat, cough, state of confusion, headaches, vertigo, drowsiness, state of unconsciousness		
toluene (108-88-3)	oral	-					sore throat, cough, state of confusion, headaches, vertigo, drowsiness, state of unconsciousness		
toluene (108-88-3)	oral	-					burning sensation, abdominal pain		
toluene (108-88-3)	inhalation						Irritates respiratory system.		

**Additional information:** May cause drowsiness or dizziness.

## SAFETY DATA SHEET

### (i) STOT-repeated exposure

Name	Exposure route	Type	Species	Time	Organ	Value	Result	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	dermal	-			skin		degreasing the skin		
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	-	-					it is assumed that does not cause damage to organs as a result of prolonged or repeated exposure	OECD 413	
colophonium (8050-09-7)	dermal	-			skin		repeated or prolonged exposure may cause sensitization.		
colophonium (8050-09-7)	inhalation	-					repeated or prolonged exposure by inhalation may cause asthma		
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	-	-					it is assumed that does not cause damage to organs as a result of prolonged or repeated exposure	OECD 413	
acetone (67-64-1)	-	-					may cause effects on the central nervous system, liver, kidneys and gastrointestinal tract		
acetone (67-64-1)	dermal	-			skin		Repeated or prolonged exposure may cause dermatitis.		
acetone (67-64-1)	-	-					may have effects on the blood and bone marrow		
toluene (108-88-3)	dermal	-			skin		degreasing the skin		
toluene (108-88-3)	-	-					may cause effects on the central nervous system, exposure to the substance may enhance hearing damage caused by exposure to noise		

**Additional information:** Repeated exposure may cause skin dryness or cracking.

### (j) Aspiration hazard

Name	Result	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	Aspiration into the lungs can cause chemical pneumonitis.		
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	Aspiration into the lungs can cause chemical pneumonitis.		
toluene (108-88-3)	Aspiration into the lungs can cause chemical pneumonitis.		

**Additional information:** May cause lung damage if swallowed and enters airways.

## 11.2. INFORMATION ON OTHER HAZARDS

### 11.2.1. Endocrine disrupting properties

No information.

### 11.2.2. Other information

No information.

# SAFETY DATA SHEET

## SECTION 12. ECOLOGICAL INFORMATION

### 12.1. TOXICITY

#### 12.1.1. Acute (short-term) toxicity

##### For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	LC <sub>50</sub>	> 1 mg/L	48 h		Orithya latipes		
	EL <sub>50</sub>	3 mg/L	48 h		Daphnia magna		
	ErL <sub>50</sub>	55 mg/L	72 h		Pseudokirchneriella subcapitata		
	NOELR	30 mg/L	72 h		Pseudokirchneriella subcapitata		
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	LC <sub>50</sub>	> 1 mg/L	48 h		Orithya latipes		
	LC <sub>50</sub>	3,87 mg/L	48 h		Daphnia magna		
	ErL <sub>50</sub>	55 mg/L	72 h		Pseudokirchneriella subcapitata		
	NOELR	30 mg/L	72 h		Pseudokirchneriella subcapitata		
acetone (67-64-1)	EC <sub>50</sub>	11000 mg/L	48 h	crustacea	Daphnia pulex		
	LC <sub>50</sub>	20000 mg/L	48 h	Aquatic organisms	ambystoma mexicanum		
	LC <sub>50</sub>	0,1 µg/cm <sup>3</sup>	48 h	Soil living organisms	Eisenia fetida		
	NOEC	530 mg/L			Microcystis aeruginosa		
toluene (108-88-3)	EC <sub>50</sub>	134 mg/L	3 h	algae	Chlorella vulgaris		
	NOEC	10 mg/L	72 h	algae	Skeletonema costatum		
	EC <sub>50</sub>	3,78 mg/L	48 h	crustacea	Daphnia magna		
	LC <sub>50</sub>	5,5 mg/L	96 h	fish	Oncorhynchus kisutch		

#### 12.1.2. Chronic (long-term) toxicity

##### For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	LL50	12 mg/l	83 days		Oncorhynchus mykiss		
acetone (67-64-1)	LC <sub>50</sub>	5540 mg/l	83 days	fish	Lepomis macrochirus		
	LC <sub>50</sub>	11000 mg/l	83 days		Alburnus alburnus		
	NOEC	2212 mg/l	28 days		Daphnia pulex		



## SAFETY DATA SHEET

### 12.2. PERSISTENCE AND DEGRADABILITY

#### 12.2.1. Abiotic degradation, physical- and photo-chemical elimination

No information.

#### 12.2.2. Biodegradation

For components

Substance (CAS Nr.)	Type	Rate	Time	Evaluation	Method	Remark
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane (-)	aerobic	98 %	28 days	readily biodegradable		
Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6)) (-)	aerobic	98 %	28 days	readily biodegradable		
acetone (67-64-1)	aerobic	91 %	28 days	readily biodegradable	OECD 301 B	
acetone (67-64-1)	COD	2,21 g O <sub>2</sub> /g				

### 12.3. BIOACCUMULATIVE POTENTIAL

#### 12.3.1. Partition coefficient

For components

Substance (CAS Nr.)	Media	Value	Temperature	pH	Concentration	Method
acetone (67-64-1)	Octanol-water (log Pow)	-0,24	20 °C			
toluene (108-88-3)	Octanol-water (log Pow)	2,73				

#### 12.3.2. Bioconcentration factor (BCF)

For components

Substance (CAS Nr.)	species	Organism	Value	Duration	Evaluation	Method	Remark
acetone (67-64-1)	BCF		3				Calculated value
toluene (108-88-3)	BCF		90				measured

### 12.4. MOBILITY IN SOIL

#### 12.4.1. Known or predicted distribution to environmental compartments

No information.

#### 12.4.2. Surface tension

No information.

#### 12.4.3. Adsorption/Desorption

For components

Substance (CAS Nr.)	Type	Criterion	Value	Evaluation	Method	Remark
acetone (67-64-1)	Soil	log KOC	0,17			20 °C
acetone (67-64-1)	Soil	Henry constant (H)	2929 – 3070 Pa.m <sup>3</sup> / mol			25 °C

### 12.5. RESULTS OF PBT AND VPVB ASSESSMENT

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

### 12.6. ENDOCRINE DISRUPTING PROPERTIES

No information.

## SAFETY DATA SHEET

### 12.7. ADDITIONAL INFORMATION

#### For product

Toxic to aquatic organisms: may cause long-term adverse effects in the aquatic environment.  
Do not allow to reach ground water, water courses or sewage system.

#### For components

##### Substance: Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Extremely volatile. Not expected to partition to sediment and wastewater solids.

##### Substance: Hydrocarbons, C6, isoalkanes (containing < 5 % n-hexane (203-777-6))

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Extremely volatile. Not expected to partition to sediment and wastewater solids.

##### Substance: acetone

Large amounts can penetrate into the soil and contaminate the underground water.  
Bioaccumulation is not expected.  
Very mobile in soil.

##### Substance: toluene

The substance is readily biodegradable.  
Air: Evaporates quickly.  
The product spreads on the water surface. Can show a small solubility in water.

## SECTION 13. DISPOSAL CONSIDERATIONS

### 13.1. WASTE TREATMENT METHODS

#### 13.1.1. Product / Packaging disposal

##### Waste chemical

Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

##### Packaging

Deliver completely emptied containers to approved waste disposal authorities. Empty containers shall not be reused.

#### 13.1.2. Waste treatment-relevant information

-

#### 13.1.3. Sewage disposal-relevant information

-

#### 13.1.4. Other disposal recommendations

-

## SECTION 14. TRANSPORT INFORMATION

### 14.1. UN NUMBER OR ID NUMBER

UN 1133

### 14.2. UN PROPER SHIPPING NAME

ADHESIVES

### 14.3. TRANSPORT HAZARD CLASS(ES)

3

### 14.4. PACKING GROUP

II



## SAFETY DATA SHEET

### 14.5. ENVIRONMENTAL HAZARDS

Additional labeling: ENVIRONMENTALLY HAZARDOUS

IMDG: MARINE POLLUTANT



### 14.6. SPECIAL PRECAUTIONS FOR USER

MARINE POLLUTANT

**Limited quantities**

5 L

**Tunnel restriction code**

(D/E)

**IMDG flashpoint**

-23 °C, c.c.

**IMDG EmS**

F-E, S-D

### 14.7. MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS

Goods may not be carried in bulk in bulk containers, containers or vehicles.

## SECTION 15. REGULATORY INFORMATION

### 15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

#### 15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

Not applicable.

### 15.2. CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16. OTHER INFORMATION

#### Indication of changes

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#### Abbreviations and acronyms

ATE - Acute Toxicity Estimate

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CEN - European Committee for Standardisation

C&L - Classification and Labelling

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

CAS# - Chemical Abstracts Service number

CMR - Carcinogen, Mutagen, or Reproductive Toxicant

CSA - Chemical Safety Assessment

CSR - Chemical Safety Report

DMEL - Derived Minimal Effect Level

DNEL - Derived No Effect Level

DPD - Dangerous Preparations Directive 1999/45/EC

DSD - Dangerous Substances Directive 67/548/EEC

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DU - Downstream User  
EC - European Community  
ECHA - European Chemicals Agency  
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)  
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)  
EEC - European Economic Community  
EINECS - European Inventory of Existing Commercial Substances  
ELINCS - European List of notified Chemical Substances  
EN - European Standard  
EQS - Environmental Quality Standard  
EU - European Union  
Euphrac - European Phrase Catalogue  
EWC - European Waste Catalogue (replaced by LoW – see below)  
GES - Generic Exposure Scenario  
GHS - Globally Harmonized System  
IATA - International Air Transport Association  
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air  
IMDG - International Maritime Dangerous Goods  
IMSBC - International Maritime Solid Bulk Cargoes  
IT - Information Technology  
IUCLID - International Uniform Chemical Information Database  
IUPAC - International Union for Pure Applied Chemistry  
JRC - Joint Research Centre  
Kow - octanol-water partition coefficient  
LC<sub>50</sub> - Lethal Concentration to 50 % of a test population  
LD<sub>50</sub> - Lethal Dose to 50% of a test population (Median Lethal Dose)  
LE - Legal Entity  
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)  
LR - Lead Registrant  
M/I - Manufacturer / Importer  
MS - Member States  
MSDS - Material Safety Data Sheet  
OC - Operational Conditions  
OECD - Organization for Economic Co-operation and Development  
OEL - Occupational Exposure Limit  
OJ - Official Journal  
OR - Only Representative  
OSHA - European Agency for Safety and Health at work  
PBT - Persistent, Bioaccumulative and Toxic substance  
PEC - Predicted Effect Concentration  
PNEC(s) - Predicted No Effect Concentration(s)  
PPE - Personal Protection Equipment  
(Q)SAR - Qualitative Structure Activity Relationship  
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
RIP - REACH Implementation Project  
RMM - Risk Management Measure  
SCBA - Self-Contained Breathing Apparatus  
SDS - Safety data sheet  
SIEF - Substance Information Exchange Forum  
SME - Small and Medium sized Enterprises  
STOT - Specific Target Organ Toxicity  
(STOT) RE - Repeated Exposure  
(STOT) SE - Single Exposure  
SVHC - Substances of Very High Concern  
UN - United Nations  
vPvB - Very Persistent and Very Bioaccumulative

### Key literature references and sources for data

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## SAFETY DATA SHEET

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### List of relevant H phrases

H225 Highly flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H361d Suspected of damaging the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure .  
H411 Toxic to aquatic life with long lasting effects.  
EUH066 Repeated exposure may cause skin dryness or cracking.

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.