



Trade name: Marabu Fixativ, 150 ml

Version: 4 / GB

Date revised: 09.07.2019

Substance number: 23111006862

Replaces Version: 3 / GB

Print date: 13.07.19

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

### **1.1. Product identifier**

Marabu Fixativ, 150 ml

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

#### **Use of the substance/preparation**

Spray varnish

#### **Identified Uses**

SU21 Consumer uses: Private households (= general public = consumers)  
PC9a Coatings and paints, thinners, paint removers

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

#### **Address**

Marabu GmbH & Co. KG  
Asperger Strasse 4  
71732 Tamm  
Germany  
Telephone no. +49-7141/691-0  
Fax no. +49-7141/691-147  
Information provided by / telephone Department product safety  
E-mail address of person responsible for this SDS PRSI@marabu.de

### **1.4. Emergency telephone number**

(+49) (0)621-60-43333

## **SECTION 2: Hazards identification**

### **2.1. Classification of the substance or mixture**

#### **Classification (Regulation (EC) No. 1272/2008)**

Classification (Regulation (EC) No. 1272/2008)

Aerosol 1	H222
	H229
Eye Irrit. 2	H319
STOT SE 3	H336

### **2.2. Label elements**

#### **Labelling according to regulation (EC) No 1272/2008**

#### **Hazard pictograms**



#### **Signal word**

Danger

#### **Hazard statements**

H222 Extremely flammable aerosol.



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H229 Pressurised container: May burst if heated.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
 P102 Keep out of reach of children.  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P211 Do not spray on an open flame or other ignition source.  
 P251 Do not pierce or burn, even after use.  
 P264.1 Wash hands thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P405 Store locked up.  
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.  
 P501.9 Dispose of contents/container as problematic waste.

**Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)**

contains Acetone;Ethyl acetate;Propan-2-ol;n-Butyl acetate;2-Methoxy-1-methylethyl acetate

**Supplemental information**

EUH066 Repeated exposure may cause skin dryness or cracking.

**Further supplemental information**

Without adequate ventilation, explosive atmosphere/gas mix may be created.

**2.3. Other hazards**

No special hazards have to be mentioned.

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

**3.2. Mixtures**

**Chemical characterization**

Solvent based spray varnish

**Hazardous ingredients**

**Acetone**

CAS No. 67-64-1  
 EINECS no. 200-662-2  
 Registration no. 01-2119471330-49  
 Concentration >= 10 < 20 %

Classification (Regulation (EC) No. 1272/2008)  
 Flam. Liq. 2 H225  
 Eye Irrit. 2 H319  
 STOT SE 3 H336

**n-Butyl acetate**

CAS No. 123-86-4  
 EINECS no. 204-658-1  
 Registration no. 01-2119485493-29  
 Concentration >= 1 < 10 %

Classification (Regulation (EC) No. 1272/2008)  
 Flam. Liq. 3 H226



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STOT SE 3 H336

**Ethyl acetate**

CAS No. 141-78-6  
 EINECS no. 205-500-4  
 Registration no. 01-2119475103-46  
 Concentration >= 1 < 10 %

Classification (Regulation (EC) No. 1272/2008)  
 Flam. Liq. 2 H225  
 Eye Irrit. 2 H319  
 STOT SE 3 H336

**Propan-2-ol**

CAS No. 67-63-0  
 EINECS no. 200-661-7  
 Registration no. 01-2119457558-25  
 Concentration >= 1 < 10 %

Classification (Regulation (EC) No. 1272/2008)  
 Flam. Liq. 2 H225  
 Eye Irrit. 2 H319  
 STOT SE 3 H336

**2-Methoxy-1-methylethyl acetate**

CAS No. 108-65-6  
 EINECS no. 203-603-9  
 Registration no. 01-2119475791-29  
 Concentration >= 1 < 10 %

Classification (Regulation (EC) No. 1272/2008)  
 Flam. Liq. 3 H226  
 STOT SE 3 H336

**Further ingredients \*\*\***

**Hydrocarbons, C3-4; Petroleum gas**

CAS No. 68476-40-4  
 EINECS no. 270-681-9  
 Registration no. 01-2119486557-22  
 Concentration >= 25 < 50 % [3]

Classification (Regulation (EC) No. 1272/2008)  
 Flam. Gas 1 H220  
 Press. Gas H280

**Dimethoxymethane**

CAS No. 109-87-5  
 EINECS no. 203-714-2  
 Concentration >= 25 < 50 % [3]

Classification (Regulation (EC) No. 1272/2008)  
 Flam. Liq. 2 H225

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[3] Substance with occupational exposure limits

## **SECTION 4: First aid measures**

### **4.1. Description of first aid measures**

#### **General information**

In all cases of doubt, or when symptoms persist, seek medical attention. If unconscious place in recovery position and seek medical advice.

#### **After inhalation**

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Summon a doctor immediately.

#### **After skin contact**

After contact with skin, wash immediately with plenty of water. Don't use solvents.

#### **After eye contact**

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

#### **After ingestion**

Summon a doctor immediately. Keep at rest. Do NOT induce vomiting.

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

Until now no symptoms known so far.

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

#### **Hints for the physician / treatment**

Treat symptomatically

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Recommended: alcohol resistant foam, CO<sub>2</sub>, powders, water spray/mist, Not be used for safety reasons: water jet

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

In the event of fire the following can be released: Carbon monoxide (CO); Carbon dioxide (CO<sub>2</sub>); dense black smoke

### **5.3. Advice for firefighters**

#### **Special protective equipment for fire-fighting**

In case of combustion use a suitable breathing apparatus.

#### **Other information**

Cool endangered containers with water spray jet. Collect contaminated fire-fighting water separately, must not be discharged into the drains.

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

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

Keep away sources of ignition. Ensure adequate ventilation. Do not breathe gas/fumes/vapour/spray. Refer to protective measures listed in Sections 7 and 8.

### **6.2. Environmental precautions**

Do not empty into drains. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.



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

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Provide good ventilation of working area (local exhaust ventilation if necessary). Handle and open container with care. Isolate from sources of heat, sparks and open flame. Avoid skin and eye contact. Smoking, eating and drinking shall be prohibited in application area. Comply with the health and safety at work laws.

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.

#### Classification of fires / temperature class / Ignition group / Dust explosion class

Classification of fires	C (Flammable gases)
Temperature class	T3

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

#### Requirements for storage rooms and vessels

Store in accordance with national regulation

#### Further information on storage conditions

Keep away from sources of ignition. Keep container in a cool, well-ventilated place. Observe label precautions.

### 7.3. Specific end use(s)

Spray varnish

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

### 8.1. Control parameters

#### Exposure limit values

##### Acetone

List	EH40			
Type	WEL			
Value	1210	mg/m <sup>3</sup>	500	ppm(V)
Short term exposure limit	3620	mg/m <sup>3</sup>	1500	ppm(V)
Status: 2011				

##### Ethyl acetate

List	EH40			
Type	WEL			
Value			200	ppm(V)
Short term exposure limit			400	ppm(V)
Status: 2011				

##### 2-Methoxy-1-methylethyl acetate

List	EH40			
Type	WEL			
Value	274	mg/m <sup>3</sup>	50	ppm(V)

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Short term exposure limit 548 mg/m<sup>3</sup> 100 ppm(V)  
 Skin resorption / sensibilisation: Sk; Status: 2011

**Propan-2-ol**

List EH40  
 Type WEL  
 Value 999 mg/m<sup>3</sup> 400 ppm(V)  
 Short term exposure limit 1250 mg/m<sup>3</sup> 500 ppm(V)  
 Status: 2011

**Dimethoxymethane**

List EH40  
 Type WEL  
 Value 3160 mg/m<sup>3</sup> 1000 ppm(V)  
 Short term exposure limit 3950 mg/m<sup>3</sup> 1250 ppm(V)  
 Status: 2011

**n-Butyl acetate**

List EH40  
 Type WEL  
 Value 724 mg/m<sup>3</sup> 150 ppm(V)  
 Short term exposure limit 966 mg/m<sup>3</sup> 200 ppm(V)  
 Status: 2011

**Derived No/Minimal Effect Levels (DNEL/DMEL) \*\*\***

**Hydrocarbons, C3-4; Petroleum gas**

Type of value Derived Minimal Effect Level (DMEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 2,21 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure dermal  
 Mode of action Systemic effects  
 Concentration 23,4 mg/kg/d

Type of value Derived Minimal Effect Level (DMEL)  
 Reference group Consumer  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 0,066 mg/m<sup>3</sup>

**Acetone**

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure dermal  
 Concentration 186 mg/kg/d

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Short term  
 Route of exposure inhalative  
 Concentration 2420 mg/m<sup>3</sup>

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Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Concentration	1210	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Concentration	62	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Concentration	62	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Concentration	200	mg/m <sup>3</sup>
<b>Ethyl acetate</b>		
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	inhalative	
Concentration	1468	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	1468	g/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Route of exposure	dermal	
Mode of action	Chronic effects	
Concentration	63	mg/kg
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Route of exposure	inhalative	
Mode of action	Chronic effects	
Concentration	734	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Route of exposure	inhalative	
Mode of action	Chronic effects	
Concentration	734	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	

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Route of exposure inhalative  
 Mode of action Acute effects  
 Concentration 734 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Consumer  
 Route of exposure inhalative  
 Mode of action Local effects  
 Concentration 734 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Consumer  
 Route of exposure dermal  
 Mode of action Chronic effects  
 Concentration 37 mg/kg

Type of value Derived No Effect Level (DNEL)  
 Reference group Consumer  
 Route of exposure inhalative  
 Mode of action Chronic effects  
 Concentration 367 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Consumer  
 Route of exposure oral  
 Mode of action Chronic effects  
 Concentration 4,5 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Consumer  
 Route of exposure inhalative  
 Mode of action Local effects  
 Concentration 367 mg/m<sup>3</sup>

**2-Methoxy-1-methylethyl acetate**

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure dermal  
 Mode of action Systemic effects  
 Concentration 796 mg/kg/d

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 275 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Consumer  
 Duration of exposure Long term  
 Route of exposure dermal  
 Mode of action Systemic effects  
 Concentration 320 mg/kg/d

Type of value Derived No Effect Level (DNEL)



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Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	33	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	33	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	36	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Lifetime	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	550	mg/m <sup>3</sup>
<b>n-Butyl acetate</b>		
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	960	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	960	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	300	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	480	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	

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Reference group General Population  
 Duration of exposure Short term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 859,7 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group General Population  
 Duration of exposure Short term  
 Route of exposure inhalative  
 Mode of action Local effects  
 Concentration 859,7 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group General Population  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 102,34 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group General Population  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Local effects  
 Concentration 102,34 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure dermal  
 Mode of action Systemic effects  
 Concentration 11 mg/kg/d

**Propan-2-ol**

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 500 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure dermal  
 Mode of action Systemic effects  
 Concentration 888 mg/kg/d

Type of value Derived No Effect Level (DNEL)  
 Reference group General Population  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 89 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)

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Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	319	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	26	mg/kg/d

**Predicted No Effect Concentration (PNEC)**

**Acetone**

Type of value	PNEC	
Type	Freshwater	
Concentration	10,6	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	1,06	mg/l

Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	21	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	30,4	mg/kg

Type of value	PNEC	
Type	Marine sediment	
Concentration	3,04	mg/kg

Type of value	PNEC	
Type	Soil	
Concentration	29,5	mg/kg

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	100	mg/l

**Ethyl acetate**

Type of value	PNEC	
Type	Water	
Concentration	0,26	mg/l

Type of value	PNEC	
Type	Aquatic	
Concentration	0,026	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,34	mg/kg

Type of value	PNEC	
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Type	Marine sediment	
Concentration	0,034	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,22	mg/kg

**2-Methoxy-1-methylethyl acetate**

Reference substance	2-Methoxy-1-methylethyl acetate	
Type of value	PNEC	
Type	Freshwater	
Concentration	0,635	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	3,29	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,29	mg/kg
Source	Literature value	
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	100	mg/l
Source	Literature value	
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,329	mg/kg
Source	Literature value	
Type of value	PNEC	
Type	Saltwater	
Concentration	0,0635	mg/l

**n-Butyl acetate**

Type of value	PNEC	
Type	Freshwater	
Concentration	0,18	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,018	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,981	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,0981	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,0903	mg/kg



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Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	35,6	mg/l

Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,36	mg/l

**Propan-2-ol**

Type of value	PNEC	
Type	Freshwater	
Concentration	140,9	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	140,9	mg/l

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	2251	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	552	mg/kg

Type of value	PNEC	
Type	Marine sediment	
Concentration	552	mg/kg

Type of value	PNEC	
Type	Soil	
Concentration	28	mg/kg

**8.2. Exposure controls**

**Exposure controls**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

**Respiratory protection**

If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Short term: filter apparatus, Filter A/P2; Self-contained breathing apparatus.

**Hand protection**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required.

Material thickness > 0,5 mm

Breakthrough time < 30 min

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.



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**Eye protection**

Safety glasses

**Body protection**

Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

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

<b>Form</b>	Aerosol		
<b>Colour</b>	colourless		
<b>Odour</b>	solvent-like		
<b>pH value</b>			
Remarks	Not applicable		
<b>Melting point</b>			
Remarks	not determined		
<b>Initial boiling point and boiling range</b>			
Value	appr. 42		°C
Pressure	1.013	hPa	
Source	Literature value		
<b>Flash point</b>			
Remarks	Not applicable		
<b>Upper/lower flammability or explosive limits</b>			
Lower explosion limit	appr. 1,2		%(V)
Upper explosion limit	appr. 19,9		%(V)
Source	Literature value		
<b>Density</b>			
Value	0,74		g/cm <sup>3</sup>
Temperature	20	°C	
<b>Solubility in water</b>			
Remarks	immiscible		
<b>Partition coefficient: n-octanol/water</b>			
Remarks	Not applicable		
<b>Ignition temperature</b>			
Value	appr. 260		°C
Source	Literature value		
<b>Viscosity</b>			
Remarks	not determined		

**9.2. Other information****Other information**

The physical specifications are approximate values and refer to the used safety relevant component(s).

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

None known

**10.2. Chemical stability**

Stable under recommended storage and handling conditions (see section 7).



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**10.3. Possibility of hazardous reactions**

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

**10.4. Conditions to avoid**

When exposed to high temperatures may produce hazardous decomposition products. Protect from heat and direct sunlight.

**10.5. Incompatible materials**

None known

**10.6. Hazardous decomposition products**

See chapter 5.2 (Firefighting measures - Special hazards arising from the substance or mixture).

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute oral toxicity**

Remarks Based on available data, the classification criteria are not met.

**Acute oral toxicity (Components)****Acetone**

Species	rat		
LD50		5800	mg/kg

**Acute dermal toxicity**

Remarks Based on available data, the classification criteria are not met.

**Acute dermal toxicity (Components)****Acetone**

Species	rabbit		
LD50		20000	mg/kg

**Acute inhalational toxicity**

Remarks Based on available data, the classification criteria are not met.

**Skin corrosion/irritation**

Remarks Based on available data, the classification criteria are not met.

**Serious eye damage/irritation**

evaluation	irritant
Remarks	The classification criteria are met.

**Sensitization**

Remarks Based on available data, the classification criteria are not met.

**Mutagenicity**

Remarks Based on available data, the classification criteria are not met.

**Reproductive toxicity**

Remarks Based on available data, the classification criteria are not met.

**Carcinogenicity**

Remarks Based on available data, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT)****Single exposure**

Remarks	The classification criteria are met.
evaluation	May cause drowsiness or dizziness.

**Repeated exposure**

Remarks Based on available data, the classification criteria are not met.



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### Aspiration hazard

Based on available data, the classification criteria are not met.

### Experience in practice

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation.

Ingestion may cause nausea, diarrhoea and vomiting.

### Other information

There are no data available on the mixture itself.

The mixture has been assessed following the additivity method of the GHS/CLP Regulation (EC) No 1272/2008.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### General information

There are no data available on the mixture itself. Do not allow to enter drains or water courses. The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as dangerous for the environment.

### 12.2. Persistence and degradability

#### General information

There are no data available on the mixture itself.

### 12.3. Bioaccumulative potential

#### Partition coefficient: n-octanol/water

Remarks Not applicable

### 12.4. Mobility in soil

#### General information

There are no data available on the mixture itself.

### 12.5. Results of PBT and vPvB assessment

#### General information

There are no data available on the mixture itself.

### 12.6. Other adverse effects

#### General information

There are no data available on the mixture itself.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations for the product

Do not allow to enter drains or water courses.

#### Disposal recommendations for packaging

Completely emptied packagings can be given for recycling.

Not emptied containers are hazardous waste (waste code number 150110).





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## **SECTION 14: Transport information**

### **Land transport ADR/RID**

- 14.1. UN number**  
UN 1950
- 14.2. UN proper shipping name**  
AEROSOLS
- 14.3. Transport hazard class(es)**
- |       |     |
|-------|-----|
| Class | 2   |
| Label | 2.1 |
- 14.4. Packing group**
- |                    |     |
|--------------------|-----|
| Packing group      | -   |
| Limited Quantity   | 1 I |
| Transport category | 2   |
- 14.5. Environmental hazards**  
-
- |                         |   |
|-------------------------|---|
| Tunnel restriction code | D |
|-------------------------|---|

### **Marine transport IMDG/GGVSee**

- 14.1. UN number**  
UN 1950
- 14.2. UN proper shipping name**  
AEROSOLS
- 14.3. Transport hazard class(es)**
- |       |     |
|-------|-----|
| Class | 2.1 |
|-------|-----|
- 14.4. Packing group**
- |               |   |
|---------------|---|
| Packing group | - |
|---------------|---|
- 14.5. Environmental hazards**  
no

### **Air transport ICAO/IATA**

- 14.1. UN number**  
UN 1950
- 14.2. UN proper shipping name**  
AEROSOLS
- 14.3. Transport hazard class(es)**
- |       |     |
|-------|-----|
| Class | 2.1 |
|-------|-----|
- 14.4. Packing group**
- |               |   |
|---------------|---|
| Packing group | - |
|---------------|---|
- 14.5. Environmental hazards**  
-

### **Information for all modes of transport**

- 14.6. Special precautions for user**  
Transport within the user's premises:  
Always transport in closed containers that are upright and secure.  
Ensure that persons transporting the product know what to do in the event of an accident or spillage.

### **Other information**

- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**  
no

## **SECTION 15: Regulatory information**

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

**Major-accident categories acc. 96/82/EC**

**Safety data sheet in accordance with regulation (EC) No 1907/2006**

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Category	8	Extremely flammable	10.000	kg	50.000	kg
<b>VOC</b>						
VOC (CH)		98,65 %	730	g/l		
VOC (EU)		98,65 %	730	g/l		

**Other information**

The product does not contain substances of very high concern (SVHC).

**15.2. Chemical safety assessment**

For this preparation a chemical safety assessment has not been carried out.

**SECTION 16: Other information****Hazard statements listed in Chapter 3**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

**CLP categories listed in Chapter 3**

Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 2	Flammable liquid, Category 2
Flam. Liq. 3	Flammable liquid, Category 3
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

**Abbreviations**

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route  
 RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses  
 GGVSee: Gefahrgutverordnung See  
 IMDG: International Maritime Code for Dangerous Goods  
 ICAO: International Air Transport Association  
 IATA: International Civil Aviation Organization  
 CAS: Chemical Abstracts Service  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 EmS: Emergency Schedules  
 AICS: Australian Inventory of Chemical Substances  
 MITI: Ministry of International Trade and Industry (Japan)  
 TSCA: Toxic Substances Control Act (USA)  
 VOC: Volatile Organic Compound  
 LD: Lethal dose  
 LC: Lethal concentration  
 SVHC: Substances of very high concern  
 DNEL: Derived no effect level  
 PNEC: Predicted no effect concentration  
 UN: United Nations  
 OEL: Occupational exposure limit

**Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*  
 This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.  
 The information in this Safety Data Sheet is based on the present state of knowledge and current legislation.

It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.  
 The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions.  
 As the specific conditions of use of the product are outside the supplier's control, the user is responsible

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for ensuring that the requirements of relevant legislation are complied with.  
The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.