

MATERIAL SAFETY DATA SHEET
as per 1907/2006/EC, Article 31735500
Reviewed on: 18.04.2017
Printing date: 18.04.2017**SECTION 01: Identification of the substance/mixture and of the company undertaking**

- **1.1 Product identifier**
- **Trade name:**
SPRAYMAT Wood varnish
- **SDB-group**
19672
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation**
Wood coating
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Alfred Clouth
Lackfabrik GmbH & Co. KG
Otto-Scheugenpflug-Straße 2
63073 Offenbach/Main
Deutschland
Tel + 49 69-89 00 7-0 / Fax + 49 69-89 00 7-143
E-Mail: info@clou.de / www.clou.de
- **Further information obtainable from:**
Laboratory:
Telephone: + 49 69/89 00 7 - 0
Fax: + 49 69/89 00 7 - 143
- **1.4 Emergency telephone number:**
Giftinformationszentrum - Nord
Universitätsklinikum
Bereich Humanmedizin
Robert Koch Str.40
37075 Göttingen
Deutschland
Tel.: + 49 551 / 1 92 40

SECTION 02: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02

Aerosol 1 - H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS07

Eye Irrit. 2 - H319 Causes serious eye irritation.
STOT SE 3 - H336 May cause drowsiness or dizziness.

Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**

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GHS02 GHS07

- **Signal word**
Danger

- **Hazard-determining components of labelling:**

n-butyl acetate / 4-methylpentan-2-one / propan-2-ol / isopropyl acetate

- **Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H319-EUH066 Causes serious eye irritation. Repeated exposure may cause skin dryness or cracking.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

- **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.

P260 Do not breathe mist/vapours/spray.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use for extinction: CO₂, sand, extinguishing powder.

P405 Store locked up.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents/container in accordance with local/regional/ national/international regulations.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:**

Not applicable.

- **vPvB:**

Not applicable.

SECTION 03: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:**

Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

<i>CAS Number</i>		<i>%</i>
115-10-6	<i>dimethyl ether</i> <i>EC number: 204-065-8</i> <i>Record number 01-2119472128-37</i> <i>substance with a Community workplace exposure limit.</i> <i>Flam. Gas 1 - H220; Press. Gas C - H280</i>	25-50
123-86-4	<i>n-butyl acetate</i> <i>EC number: 204-658-1</i>	10-25

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	Record number 01-2119485493-29	
	Flam. Liq. 3 - H226; STOT SE 3 - H336	
108-10-1	4-methylpentan-2-one	2,5-10
	EC number: 203-550-1	
	Record number 01-2119473980-30	
	Flam. Liq. 2 - H225; Acute Tox. 4 - H332, Eye Irrit. 2 - H319-EUH066, STOT SE 3 - H335	
67-63-0	propan-2-ol	2,5-10
	EC number: 200-661-7	
	Record number 01-2119457558-25	
	Flam. Liq. 2 - H225; Eye Irrit. 2 - H319, STOT SE 3 - H336	
108-21-4	isopropyl acetate	2,5-10
	EC number: 203-561-1	
	Record number 01-2119537214-46	
	Flam. Liq. 2 - H225; Eye Irrit. 2 - H319-EUH066, STOT SE 3 - H336	
64-17-5	ethanol	2,5-10
	EC number: 200-578-6	
	Record number 01-2119457610-43	
	Flam. Liq. 2 - H225; Eye Irrit. 2 - H319	
64742-49-0	Naphtha (petroleum), hydrotreated light	2,5-10
	EC number: 920-750-0	
	Record number 01-2119473851-33	
	Flam. Liq. 2 - H225; Asp. Tox. 1 - H304; Skin Irrit. 2 - H315, STOT SE 3 - H336; Aquatic Chronic 2 - H411	
107-98-2	1-methoxy-2-propanol	2,5-10
	EC number: 203-539-1	
	Record number 01-2119457435-35	
	Flam. Liq. 3 - H226; STOT SE 3 - H336	
67-64-1	acetone	2,5-10
	EC number: 200-662-2	
	Record number 01-2119471330-49	
	Flam. Liq. 2 - H225; Eye Irrit. 2 - H319-EUH066, STOT SE 3 - H336	
64742-49-0	Hydrocarbons, C9-C10, alkanes, isoalkanes, cyclics, <2% aromatics	< 1,5
	EC number: 927-241-2	
	Record number 01-2119471843-32	
	Asp. Tox. 1 - H304; Flam. Liq. 3 - H226; STOT SE 3 - H336; Aquatic Chronic 3 - H412	

• **Additional information:**

For the wording of the listed risk phrases refer to section 16.

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SECTION 04: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Take off or remove contaminated clothing immediately.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Seek medical treatment in case of complaints.
- **After skin contact:**
Wash thoroughly with soap and water immediately and rinse well.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Drink copious amounts of water and provide fresh air. Call for a doctor immediately.
- **Information for doctor:**
Treat symptomatically.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 05: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Foam
Carbon dioxide
Fire-extinguishing powder
- **For safety reasons unsuitable extinguishing agents:**
Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Mouth respiratory protective device.
- **Additional information**
Cool endangered receptacles with water spray.
Bring if possible, containers from the danger zone. With heating up, printing increase, Berst and danger of explosion.

SECTION 06: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Protection regulations (see point 7 and 8) to consider.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
Possible warning the neighbourhood.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 07: Handling and storage

- **Handling:**
- **7.1 Precautions for safe handling**
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
Use only in well ventilated areas.
Smoking, drinking and eating are not permitted at the working place!
Keep out of the reach of children.
Do not breathe in fumes.
Do not empty into drains.
Do not puncture or burn the can after use!
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
Fumes can combine with air to form an explosive mixture.
Vapours are heavier than air.
- **Application by spraying:**
If any persons, regardless whether or not they actually perform spray-painting themselves, are working inside the spraying chamber during varnishing there is the risk that they will be exposed to aerosols and fumes of solvent. Particularly in regard to spraying mist it is rather improbable that the maximum permissible values for dust particles will be constantly met. Under such conditions it is recommended to wear breathing masks (half masks with particle filter of at least filter class P 2 or force-ventilated breathing masks) until aerosol and solvent fumes concentrations will be again under the limit value for exposition.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
The official regulations for the storage of paints and varnishes and Chemicals must be observed.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
- **Further information about storage conditions:**
Do not gas tight seal receptacle.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **Storage class:**
2B
- **7.3 Specific end use(s)**
For more information, please refer to the technical data sheet.

SECTION 08: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**

115-10-6	dimethyl ether		
WEL			
	<i>Short-term value</i>	958	mg/m3
		500	ppm
	<i>Long-term value</i>	766	mg/m3
		400	ppm
123-86-4	n-butyl acetate		
WEL			

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	Short-term value	966	mg/m3
		200	ppm
	Long-term value	724	mg/m3
		150	ppm
108-10-1	4-methylpentan-2-one		
WEL			
	Short-term value	416	mg/m3
		100	ppm
	Long-term value	208	mg/m3
		50	ppm
	Sk, BMGV		
67-63-0	propan-2-ol		
WEL			
	Short-term value	1250	mg/m3
		500	ppm
	Long-term value	999	mg/m3
		400	ppm
108-21-4	isopropyl acetate		
WEL			
	Short-term value	849	mg/m3
		200	ppm
64-17-5	ethanol		
WEL			
	Long-term value	1920	mg/m3
		1000	ppm
107-98-2	1-methoxy-2-propanol		
WEL			
	Short-term value	560	mg/m3
		150	ppm
	Long-term value	375	mg/m3
		100	ppm
	Sk		
67-64-1	acetone		
WEL			
	Short-term value	3620	mg/m3
		1500	ppm
	Long-term value	1210	mg/m3
		500	ppm

• **DNELs**

115-10-6 dimethyl ether

A, DNEL/DMEL: 1894 mg/m3 (Worker, Long Term Exposure)

123-86-4 n-butyl acetate

A, DNEL/DMEL: 35,7 mg/m3 (Consumer, Long Term Exposure)

A, DNEL/DMEL: 300 mg/m3 (Worker, Long Term Exposure)

A, DNEL/DMEL: 300 mg/m3 (Consumer, Short Term Exposure)

A, DNEL/DMEL: 960 mg/m3 (Worker, Short Term Exposure)

H, DNEL/DMEL: 6 mg/kg (Consumer, Long Term Exposure)

H, DNEL/DMEL: 11 mg/kg (Worker, Long Term Exposure)

H, DNEL/DMEL: 6 mg/kg (Consumer, Short Term Exposure)

H, DNEL/DMEL: 11 mg/kg (Worker, Short Term Exposure)

Oral, DNEL/DMEL: 2 mg/kg (Consumer, Long Term Exposure)

Oral, DNEL/DMEL: 2 mg/kg (Consumer, Short Term Exposure)

108-10-1 4-methylpentan-2-one

A, DNEL/DMEL: 14,7 mg/m3 (Consumer, Long Term Exposure)

A, DNEL/DMEL: 83 mg/m3 (Worker, Long Term Exposure)

A, DNEL/DMEL: 155,2 mg/m3 (Consumer, Short Term Exposure)

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A, DNEL/DMEL: 208 mg/m³ (Worker, Short Term Exposure)
H, DNEL/DMEL: 4,2 mg/kg (Consumer, Long Term Exposure)
H, DNEL/DMEL: 11,8 mg/kg (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 4,2 mg/kg (Consumer, Long Term Exposure)

67-63-0 *propan-2-ol*

A, DNEL/DMEL: 89 mg/m³ (Consumer, Long Term Exposure)
A, DNEL/DMEL: 500 mg/m³ (Worker, Long Term Exposure)
H, DNEL/DMEL: 319 mg/kg (Consumer, Long Term Exposure)
H, DNEL/DMEL: 888 mg/kg (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 26 mg/kg (Consumer, Long Term Exposure)

108-21-4 *isopropyl acetate*

A, DNEL/DMEL: 252 mg/m³ (Consumer, Long Term Exposure)
A, DNEL/DMEL: 420 mg/m³ (Worker, Long Term Exposure)
A, DNEL/DMEL: 510 mg/m³ (Consumer, Short Term Exposure)
A, DNEL/DMEL: 850 mg/m³ (Worker, Short Term Exposure)
H, DNEL/DMEL: 26 mg/kg (Consumer, Long Term Exposure)
H, DNEL/DMEL: 43 mg/kg (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 26 mg/kg (Consumer, Long Term Exposure)

64-17-5 *ethanol*

A, DNEL/DMEL: 114 mg/m³ (Consumer, Long Term Exposure)
A, DNEL/DMEL: 950 mg/m³ (Worker, Long Term Exposure)
A, DNEL/DMEL: 950 mg/m³ (Consumer, Short Term Exposure)
A, DNEL/DMEL: 1900 mg/m³ (Worker, Short Term Exposure)
H, DNEL/DMEL: 206 mg/kg (Consumer, Long Term Exposure)
H, DNEL/DMEL: 343 mg/kg (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 87 mg/kg (Consumer, Long Term Exposure)

64742-49-0 *Naphtha (petroleum), hydrotreated light*

A, DNEL/DMEL: 608 mg/m³ (Consumer, Long Term Exposure)
A, DNEL/DMEL: 2035 mg/m³ (Worker, Long Term Exposure)
H, DNEL/DMEL: 699 mg/kg (Consumer, Long Term Exposure)
H, DNEL/DMEL: 773 mg/kg (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 699 mg/kg (Consumer, Long Term Exposure)

107-98-2 *1-methoxy-2-propanol*

A, DNEL/DMEL: 43,9 mg/m³ (Consumer, Long Term Exposure)
A, DNEL/DMEL: 369 mg/m³ (Worker, Long Term Exposure)
A, DNEL/DMEL: 553,5 mg/m³ (Worker, Short Term Exposure)
H, DNEL/DMEL: 78 mg/kg (Consumer, Long Term Exposure)
H, DNEL/DMEL: 183 mg/kg (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 3,3 mg/kg (Consumer, Long Term Exposure)

67-64-1 *acetone*

A, DNEL/DMEL: 200 mg/m³ (Consumer, Long Term Exposure)
A, DNEL/DMEL: 1210 mg/m³ (Worker, Long Term Exposure)
A, DNEL/DMEL: 2420 mg/m³ (Worker, Short Term Exposure)
H, DNEL/DMEL: 62 mg/kg (Consumer, Long Term Exposure)
H, DNEL/DMEL: 186 mg/kg (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 62 mg/kg (Consumer, Long Term Exposure)

64742-49-0 *Hydrocarbons, C9-C10, alkanes, isoalkanes, cyclics, <2% aromatics*

A, DNEL/DMEL: 900 mg/m³ (Consumer, Long Term Exposure)
A, DNEL/DMEL: 1500 mg/m³ (Worker, Long Term Exposure)
H, DNEL/DMEL: 125 mg/kg (Consumer, Long Term Exposure)
H, DNEL/DMEL: 300 mg/kg (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 300 mg/kg (Consumer, Long Term Exposure)

• **PNECs**

115-10-6 *dimethyl ether*

PNEC: 0,155 mg/l (Fresh water)
PNEC: 0,016 mg/l (Seawater)
PNEC: 160 mg/l (Defecator)
PNEC: 0,681 mg/kg (sediment (Fresh water))
PNEC: 0,069 mg/kg (sediment (seawater))

123-86-4 *n-butyl acetate*

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PNEC: 0,18 mg/l (Fresh water)
PNEC: 0,018 mg/l (Seawater)
PNEC: 0,36 mg/l (Liberation - sporadic -)
PNEC: 35,6 mg/l (Defecator)
PNEC: 0,981 mg/kg (sediment (Fresh water))
PNEC: 0,0981 mg/kg (sediment (seawater))
PNEC: 0,0903 mg/kg (Bottom)

108-10-1 4-methylpentan-2-one

PNEC: 0,6 mg/l (Fresh water)
PNEC: 0,06 mg/l (Seawater)
PNEC: 27,5 mg/l (Defecator)
PNEC: 8,27 mg/kg (sediment (Fresh water))
PNEC: 0,83 mg/kg (sediment (seawater))
PNEC: 1,3 mg/kg (Bottom)

67-63-0 propan-2-ol

PNEC: 140,9 mg/l (Fresh water)
PNEC: 140,9 mg/l (Seawater)
PNEC: 2251 mg/l (Defecator)
PNEC: 552 mg/kg (sediment (Fresh water))
PNEC: 552 mg/kg (sediment (seawater))
PNEC: 28 mg/kg (Bottom)

108-21-4 isopropyl acetate

PNEC: 0,22 mg/l (Fresh water)
PNEC: 0,022 mg/l (Seawater)
PNEC: 1,25 mg/kg (sediment (Fresh water))
PNEC: 0,125 mg/kg (sediment (seawater))

64-17-5 ethanol

PNEC: 0,96 mg/l (Fresh water)
PNEC: 0,79 mg/l (Seawater)
PNEC: 2,75 mg/l (Liberation - sporadic -)
PNEC: 580 mg/l (Defecator)
PNEC: 3,6 mg/kg (sediment (Fresh water))
PNEC: 2,9 mg/kg (sediment (seawater))
PNEC: 0,63 mg/kg (Bottom)

107-98-2 1-methoxy-2-propanol

PNEC: 10 mg/l (Fresh water)
PNEC: 1 mg/l (Seawater)
PNEC: 100 mg/l (Liberation - sporadic -)
PNEC: 100 mg/l (Defecator)
PNEC: 52,3 mg/kg (sediment (Fresh water))
PNEC: 5,2 mg/kg (sediment (seawater))
PNEC: 4,59 mg/kg (Bottom)

67-64-1 acetone

PNEC: 10,6 mg/l (Fresh water)
PNEC: 1,06 mg/l (Seawater)
PNEC: 21 mg/l (Liberation - sporadic -)
PNEC: 100 mg/l (Defecator)
PNEC: 30,4 mg/kg (sediment (Fresh water))
PNEC: 3,04 mg/kg (sediment (seawater))
PNEC: 29,5 mg/kg (Bottom)

• **Ingredients with biological limit values:**

108-10-1 4-methylpentan-2-one

BMGV

20 µmol/L

Medium: urine

Sampling time: post shift

Parameter: 4-methylpentan-2-one

- **8.2 Exposure controls**
- **Personal protective equipment:**

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- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes.
- **Respiratory protection: If the solvent concentration is above WEL limits, a breathing mask approved for this purpose must be worn. Filter A2/P2.**
- **Protection of hands: The glove material has to be impermeable and resistant to the product the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Protective gloves made of latex / neoprene. Degradation effect G to E Instalment of permeation E to ND (< 0.9 µg / cm² / min). Protective factor index: special subject class 6 Preventive skin protection by use of skin-protecting agents is recommended. After use of gloves apply skin-cleaning agents and skin cosmetics.**
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Eye protection: Safety glasses**
- **Body protection: Protective work clothing**

SECTION 09: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Aerosol
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not applicable.

Change in condition Phase transfer: fluid - solid

Melting point/Melting range:	Undetermined.		
Boiling point/Boiling range (approximately):	-24,9 °C		
Flash point (approximately):	-42,0 °C	DIN 51 755	
Flammability (solid, gaseous):	Not applicable.		
Ignition temperature (approximately):	235,00 °C (lowest value of the single components)		
Decomposition temperature:	Not determined.		
Self-igniting:	Product is not selfigniting.		
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.		
Explosion limits:			
Lower:	1,20 Vol %		
Upper:	18,60 Vol %		
Oxidizing properties	Not determined		
Vapour pressure:	at 20,00 °C	11,6000 hPa at 50,00 °C	57,7000 hPa
Density:	0,8960 g/cm ³		
Vapour density	Not determined.		
Evaporation rate	Not applicable.		
Solubility in / Miscibility with water:	Organic solvents Insoluble.		
Partition coefficient (n-octanol/water):	Not determined.		
Viscosity (according to DIN 53211)			
Dynamic:	Not determined.		

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Kinematic:	Not determined.
Solvent separation test:	< 3 %
Solvent content (approximately):	
Organic solvents (approximately):	89,00 %
Solids content (approximately):	11,00 %
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
On storage in containers no traffic laws intolerances are to be expected with the tank shell.
- **10.2 Chemical stability**
Stable at room temperature
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Forms explosive gases/fumes.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.
- **10.4 Conditions to avoid**
No further relevant information available.
- **10.5 Incompatible materials:**
No further relevant information available.
- **10.6 Hazardous decomposition products:**
Flammable gases/vapours

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**
 - 115-10-6 dimethyl ether**
Inhalative, LC50/4h: 308 mg/l (rat)
 - 123-86-4 n-butyl acetate**
Oral, LD50: > 10000 mg/kg (rat)
Dermal, LD50: > 14000 mg/kg (Rabbit)
Inhalative, LC50/4h: > 21,1 mg/l (rat)
 - 108-10-1 4-methylpentan-2-one**
Oral, LD50: 2100 mg/kg (rat)
Dermal, LD50: > 2000 mg/kg (rat)
Inhalative, LC50/4h: 8,3-16,6 mg/l (rat)
 - 67-63-0 propan-2-ol**
Oral, LD50: 4750 mg/kg (rat)
Dermal, LD50: 12800 mg/kg (Rabbit)
Inhalative, LC50/4h: 30 mg/l (rat)
 - 108-21-4 isopropyl acetate**
Oral, LD50: 6750 mg/kg (rat)
Dermal, LD50: 17400 mg/kg (Rabbit)
Inhalative, LC50/4h: 50,6 mg/l (rat)
 - 64-17-5 ethanol**
Oral, LD50: > 2000 mg/kg (rat)
Dermal, LD50: > 2000 mg/kg (Rabbit)
Inhalative, LC50/4h: > 20 mg/l (rat)
 - 64742-49-0 Naphtha (petroleum), hydrotreated light**
Oral, LD50: > 5840 mg/kg (rat)
Dermal, LD50: > 2920 mg/kg (rat)
Dermal, LD50: > 2000 mg/kg (Rabbit)
Inhalative, LC50/4h: > 23,3 mg/l (rat)
 - 107-98-2 1-methoxy-2-propanol**

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Oral, LD50: 4016 mg/kg (rat)
Dermal, LD50: > 2000 mg/kg (Rabbit)
Inhalative, LC50/4h: > 25,8 mg/l (rat)

67-64-1 acetone

Oral, LD50: 5800 mg/kg (rat)
Dermal, LD50: 20000 mg/kg (Rabbit)
Inhalative, LC50/4h: 76 mg/l (rat)

64742-49-0 Hydrocarbons, C9-C10, alkanes, isoalkanes, cyclics, <2% aromatics

Oral, LD50: > 5000 mg/kg (rat)
Dermal, LD50: > 3160 mg/kg (Rabbit)
Inhalative, LC50/4h: > 5 mg/l (rat)

• **Primary irritant effect:**

• **on the skin:**

Frequent and prolonged skin contact can cause irritation and inflammation of the skin.
Repeated exposure may cause skin dryness or cracking.

• **on the eye:**

Irritating effect.

• **Sensitization:**

No sensitising effects known.

• **Additional toxicological information:**

The breathing in of solvent proportions above the value of M. W. C.-value can lead to health damages, such as irritating mucous membranes and respiratory organs, kidney and liver damages as well as to the impairment of the central nervous system. Signs and symptoms: Headache, dizziness and tiredness, myasthenia, numbing effect and also unconsciousness in exceptional cases. Longer and repeated skin contact can lead to drying out the skin or to skin irritations, respectively. Solvent splashes can lead to eye irritations and reversible damages. In such cases a physician should be consulted at once.

The product shows the following dangers based on the calculation method of the General EU Classification Guidelines for Substances and Mixtures according to the CLP Regulation in the latest version:

Eye Irrit. 2 - H319 Causes serious eye irritation.

STOT SE 3 - H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

SECTION 12: Ecological information

• **12.1 Toxicity**

• **Aquatic toxicity:**

123-86-4 n-butyl acetate

fish, L(E)C50: 18 mg/l
alga, L(E)C50: 675 mg/l
daphnie, L(E)C50: 44 mg/l
alga, NOEC: 200 mg/l

108-10-1 4-methylpentan-2-one

fish, L(E)C50: > 179 mg/l
daphnie, L(E)C50: > 200 mg/l

67-63-0 propan-2-ol

fish, L(E)C50: 9640 mg/l
daphnie, L(E)C50: 13299 mg/l

108-21-4 isopropyl acetate

fish, L(E)C50: 360 mg/l
alga, L(E)C50: 370 mg/l
daphnie, L(E)C50: > 1000 mg/l

64-17-5 ethanol

fish, L(E)C50: 15300 mg/l
daphnie, L(E)C50: > 10000 mg/l

64742-49-0 Naphtha (petroleum), hydrotreated light

daphnie, L(E)C50: 4,6 - 10,0 mg/l

107-98-2 1-methoxy-2-propanol

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fish, L(E)C50: > 1000 mg/l
alga, L(E)C50: > 1000 mg/l
daphnie, L(E)C50: 23300 mg/l

67-64-1 acetone

fish, L(E)C50: 8120 mg/l
alga, L(E)C50: 3400 mg/l
daphnie, L(E)C50: 12100 mg/l

64742-49-0 Hydrocarbons, C9-C10, alkanes, isoalkanes, ccyclics, <2% aromatics

fish, L(E)C50: 50,9 mg/l
alga, L(E)C50: 1000 mg/l
daphnie, L(E)C50: 22-46 mg/l

• **12.2 Persistence and degradability**

No further relevant information available.

• **12.3 Bioaccumulative potential**

No further relevant information available.

• **12.4 Mobility in soil**

No further relevant information available.

• **Additional ecological information:**

• **General notes:**

Do not allow product to reach ground water, water course or sewage system.
Water hazard class 1 : slightly hazardous for water

• **12.5 Results of PBT and vPvB assessment**

• **PBT:**

Not applicable.

• **vPvB:**

Not applicable.

• **12.6 Other adverse effects**

No further relevant information available.

SECTION 13: Disposal considerations

• **13.1 Waste treatment methods**

• **Recommendation**

The mentioned waste code number according to the European waste code catalogue are regarded as a recommendation. A final determining has to be effected in agreement with the regional place of waste disposal as well as the competent authorities.

• **Waste disposal key:**

16 05 05 gases in pressure containers other than those mentioned in 16 05 04

• **European waste catalogue**

16

WASTES NOT OTHERWISE SPECIFIED IN THE LIST

16 05

gases in pressure containers and discarded chemicals

16 05 05

gases in pressure containers other than those mentioned in 16 05 04

• **Uncleaned packaging:**

Disposal of uncleaned packagings according to European waste code number 15 01 10.

• **Recommendation:**

Disposal according to 15 01 04 (metal).

EAK-Nummer 15 01 02 / plastic

Packaging can be reused or recycled after cleaning.

GB

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SECTION 14: Transport information

• **14.1 UN-Number**

ADR UN1950

IMDG UN1950

IATA UN1950

• **14.2 UN proper shipping name**

ADR 1950 AEROSOLS (DIMETHYL ETHER, METHYL ISOBUTYL KETONE)

IMDG AEROSOLS (DIMETHYL ETHER, METHYL ISOBUTYL KETONE)

IATA AEROSOLS (DIMETHYL ETHER, METHYL ISOBUTYL KETONE)

• **14.3 Transport hazard class(es)**

ADR
Class 2 Gases.

Label

2.1



IMDG

Class 2.1

Label

2.1



IATA

Class 2.1

Label

2.1



• **14.4 Packing group**

ADR -

IMDG -

IATA -

• **14.5 Environmental hazards:**

Not applicable.

• **14.6 Special precautions for user**

Warning: Gases.

Danger code (Kemler): 23

EMS Number: F-D,S-U

• **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

• **Transport/Additional information:**

Not applicable.

Excepted quantities (EQ): E0

Limited quantities (LQ): 1L

Transport category: 2

Tunnel restriction code: D

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IMDG

Limited quantities (LQ) 1L

Excepted quantities (EQ) E0

- **UN "Model Regulation":**
UN 1950 AEROSOLS (DIMETHYL ETHER, METHYL ISOBUTYL KETONE), 2 (2.1), -

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **REGULATION (EC) No 1907/2006 ANNEX XVII**
Conditions of restriction: 48, 52a

- **National regulations:**

- **Information about limitation of use:**
Pregnant and breastfeeding women and young persons.

- **Waterhazard class:**
Water hazard class 1 : slightly hazardous for water.

- **15.2 Chemical safety assessment:**
For this product no appraisal of substance safety was carried out. Information from exposure scenarios of the following substances were integrated into section 1-16:

n-butyl acetate

acetone

ethanol

propan-2-ol

isopropyl acetate

Naphtha (petroleum), hydrotreated light (EC number: 920-750-0)

Hydrocarbons, C9-C10, alkanes, isoalkanes, ccyclics, <2% aromatics

1-methoxy-2-propanol

4-methylpentan-2-one

The compliance with the application conditions and measures for risk minimisation contained in this material safety data sheet ensures the conformity with the existing exposure scenarios.

Storage class:

2B

SECTION 16: Other information

Other information:

- **Reasons for changes**

There was a change in the chemical composition.

- **Relevant phrases**

EUH066 Repeated exposure may cause skin dryness or cracking.

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

- **Department issuing MSDS:**

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Laboratory / Department of Material Safety Data Sheets: Phone: +49 69 89 00 7 - 104 / Fax: +49 69 89 00 7 - 452 / E-Mail: cosima.sattler@clou.de

- **Information:**

The information given in this safety data sheet is based on the present level of knowledge, but does not represent an assurance of product characteristics.

The user is responsible for observing all necessary legal regulations.

For further information on the handling and application of the product(s), please refer to our label and the technical instructions leaflet or contact our Customer Service Department on Tel.: 49 69 / 89 00 7 -124, -107 or -227.

According to § 14 GefStoffV the employer must provide instruction to the employees affected on the basis of the operating instructions every year. The content and time of the instruction is to be recorded in writing and confirmed by signatures from those receiving instruction.

Please observe work safety measures in items 8 and 15.

Use only for intended purposes. Keep out of the reach of children.

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

- *** Data compared to the previous version altered.**