Safety data sheet
as per 1907/2006/EC, Article 31

834800

Reviewed on: 05.12.2018
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SECTION 01: Identification of the substance/mixture and of the company undertaking

- **1.1 Product identifier**

- **Trade name:**
  Zapon lacquer (Metal varnish)

SDB-group
18361
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**

- **Application of the substance / the preparation**
  Surface protection

- **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
  Germany
  Tel.: +49 69 - 89 00 7 - 0 / Fax : +49 69 - 89 00 7 - 140
  E-Mail: info@clou.de / www.clou.de

- **Further information obtainable from:**
  Laboratory:
  Tel.: +49 69 89 00 7 - 104 / Fax: +49 69 89 00 7 - 48104
  E-Mail: cosima.sattler@clou.de
- **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**
  Flam. Liq. 2 - H225 Highly flammable liquid and vapour.
  Eye Dam. 1 - H318 Causes serious eye damage.
  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**
- **Hazard pictograms**

GHS02 GHS05 GHS07

- **Signal word**
  Danger

- **Hazard-determining components of labelling:**
  N-butyl acetate / isopropyl acetate / iso-butanol / Butan-1-ol

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- **Hazard statements**
H225 Highly flammable liquid and vapour.
H318-EUH066 Causes serious eye damage. 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.
P233 Keep container tightly closed.
P241 Use explosion-proof equipment.
P243 Take action to prevent static discharges.
P261 Avoid breathing mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye 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.
P310 Immediately call a POISON CENTER/doctor.
P370+P378 In case of fire: Use to extinguish: CO2, sand, extinguishing powder.
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:**

CAS Number		*%*
123-86-4	*N-butyl acetate* *EC number: 204-658-1* *Record number 01-2119485493-29* *Flam. Liq. 3 - H226; STOT SE 3 - H336*	*25-50*
108-21-4	*isopropyl acetate* *EC number: 203-561-1* *Record number 01-2119537214-46* *Flam. Liq. 2 - H225; Eye Irrit. 2 - H319-EUH066, STOT SE 3 - H336*	*10-25*
67-63-0	*Propan-2-ol* *EC number: 200-661-7* *Record number 01-2119457558-25* *Flam. Liq. 2 - H225; Eye Irrit. 2 - H319, STOT SE 3 - H336*	*2,5-10*
107-98-2	*1-methoxy-2-propanol* *EC number: 203-539-1*	*2,5-10*

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	Record number 01-2119457435-35 ***Flam. Liq. 3 - H226; STOT SE 3 - H336***	
64742-49-0	***Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics*** ***EC number: 920-750-0*** ***Record number 01-2119473851-33*** ***Flam. Liq. 2 - H225; Asp. Tox. 1 - H304; STOT SE 3 - H336; Aquatic Chronic 2 - H411***	***2,5-10***
141-78-6	***ethyl acetate*** ***EC number: 205-500-4*** ***Record number 01-2119475103-46*** ***Flam. Liq. 2 - H225; Eye Irrit. 2 - H319-EUH066, STOT SE 3 - H336***	***2,5-10***
78-83-1	***iso-butanol*** ***EC number: 201-148-0*** ***Record number 01-2119484609-23*** ***Eye Dam. 1 - H318; Flam. Liq. 3 - H226; Skin Irrit. 2 - H315, STOT SE 3 - H335-H336***	***2,5-10***
71-36-3	***Butan-1-ol*** ***EC number: 200-751-6*** ***Record number 01-2119484630-38*** ***Eye Dam. 1 - H318; Flam. Liq. 3 - H226; Acute Tox. 4 - H302, Skin Irrit. 2 - H315, STOT SE 3 - H335-H336***	***2,5-10***
64-17-5	***ethanol*** ***EC number: 200-578-6*** ***Record number 01-2119457610-43*** ***Flam. Liq. 2 - H225; Eye Irrit. 2 - H319***	***< 2,5***

- **SVHC**
  This product contains no substances in the SVHC list in a concentration > 0,1 %.

- **Additional information:**
  For the wording of the listed risk phrases refer to section 16.

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. Then consult a doctor.

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- **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
  Fire-extinguishing powder
  Carbon dioxide
- **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:**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  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.

SECTION 07: Handling and storage

- **Handling:**
- **7.1 Precautions for safe handling**
  Ensure good ventilation/exhaustion at the workplace.
  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.
- **Information about fire - and explosion protection:**

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Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
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:**
Store in cool, dry conditions in well sealed receptacles.
- **Storage class:**
3
- **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:**

123-86-4	***N-butyl acetate***		
WEL			
	Short-term value	***966***	***mg/m3***
		200	***ppm***
	Long-term value	***724***	***mg/m3***
		150	***ppm***
108-21-4	***isopropyl acetate***		
WEL			
	Short-term value	***849***	***mg/m3***
		200	***ppm***
67-63-0	***Propan-2-ol***		
WEL			
	Short-term value	***1250***	***mg/m3***
		500	***ppm***
	Long-term value	***999***	***mg/m3***
		400	***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		
141-78-6	***ethyl acetate***		

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WEL

Short-term value	***400***	***ppm***
Long-term value	***200***	***ppm***

78-83-1 iso-butanol

WEL

Short-term value	***231***	***mg/m3***
	75	***ppm***
Long-term value	***154***	***mg/m3***
	50	***ppm***

71-36-3 Butan-1-ol

WEL

Short-term value	***154***	***mg/m3***
	50	***ppm***

Sk

64-17-5 ethanol

WEL

Long-term value	***1920***	***mg/m3***
	1000	***ppm***

- **DNELs**

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)

108-21-4 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)

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)

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)

64742-49-0 Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
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)

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Oral, DNEL/DMEL: 699 mg/kg (Consumer, Long Term Exposure)

141-78-6 ethyl acetate
A, DNEL/DMEL: 367 mg/m3 (Consumer, Long Term Exposure)
A, DNEL/DMEL: 734 mg/m3 (Worker, Long Term Exposure)
A, DNEL/DMEL: 734 mg/m3 (Consumer, Short Term Exposure)
A, DNEL/DMEL: 1468 mg/m3 (Worker, Short Term Exposure)
H, DNEL/DMEL: 37 mg/kg (Consumer, Long Term Exposure)
H, DNEL/DMEL: 63 mg/kg (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 4,5 mg/kg (Consumer, Long Term Exposure)

78-83-1 iso-butanol
A, DNEL/DMEL: 55 mg/m3 (Consumer, Long Term Exposure)
A, DNEL/DMEL: 310 mg/m3 (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 25 mg/kg (Consumer, Long Term Exposure)

71-36-3 Butan-1-ol
A, DNEL/DMEL: 55 mg/m3 (Consumer, Long Term Exposure)
A, DNEL/DMEL: 310 mg/m3 (Worker, Long Term Exposure)
Oral, DNEL/DMEL: 3125 mg/kg (Worker, 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)

- **PNECs**

123-86-4 N-butyl acetate
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)

108-21-4 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)

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)

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)

141-78-6 ethyl acetate
PNEC: 0,24 mg/l (Fresh water)
PNEC: 0,024 mg/l (Seawater)
PNEC: 650 mg/l (Defecator)
PNEC: 1,15 mg/kg (sediment (Fresh water)

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PNEC: 0,115 mg/kg (sediment (seawater)
PNEC: 0,148 mg/kg (Bottom)

78-83-1 iso-butanol
PNEC: 0,4 mg/l (Fresh water)
PNEC: 0,04 mg/l (Seawater)
PNEC: 1,52 mg/kg (sediment (Fresh water)
PNEC: 0,152 mg/kg (sediment (seawater)

71-36-3 Butan-1-ol
PNEC: 0,082 mg/l (Fresh water)
PNEC: 0,0082 mg/l (Seawater)
PNEC: 2476 mg/l (Defecator)
PNEC: 0,178 mg/kg (sediment (Fresh water)
PNEC: 0,0178 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)

- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing
  Avoid contact with the eyes and skin.
- **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. Preventive skin protection by use of skin-protecting agents is recommended. Protective gloves made of latex / neoprene. Degradation effect G to E Instalment of permeation E to ND (< 0.9 µg / cm 2 / min). Protective factor index: special subject class 6. 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:	Liquid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not usable on solvent preparations.
Change in condition Phase transfer: fluid - solid	
Melting point/freezing point:	Undetermined.

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Initial boiling point and boiling range:	78,0 °C
Flash point (approximately):	13,0 °C DIN 51 755
Flammability (solid, gas):	Not applicable.
Ignition temperature (approximately):	180,00 °C (lowest value of the single components)
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	1,80 Vol %
Upper:	10,00 Vol %
Oxidising properties	Not determined
Vapour pressure:	Not determined.
Density:	0,8800 g/cm3
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	Organic solvents
water:	Insoluble.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity (according to DIN 53211)	
Dynamic:	Not determined.
Kinematic:	at 20,00 °C 70,00 s DIN 4 mm
Solvent separation test:	< 3 %
Solvent content (approximately):	
Organic solvents (approximately):	90,00 %
VOC (EC)	782,00 g/l
Solids content (approximately):	10,00 %
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:**

123-86-4 ***N-butyl acetate***

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Oral, LD50: 13100 mg/kg (rat)
Dermal, LD50: >5000 mg/kg (Rabbit)
Inhalative, LC50/4h: > 21,1 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)

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)

107-98-2 1-methoxy-2-propanol
Oral, LD50: 4016 mg/kg (rat)
Dermal, LD50: > 2000 mg/kg (Rabbit)
Inhalative, LC50/4h: > 25,8 mg/l (rat)

64742-49-0 Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
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)

141-78-6 ethyl acetate
Oral, LD50: 5600 mg/kg (rat)
Dermal, LD50: 18000 mg/kg (Rabbit)
Inhalative, LC50/4h: 56 mg/l (rat)

78-83-1 iso-butanol
Oral, LD50: 2830 mg/kg (rat)
Dermal, LD50: > 2000 mg/kg (Rabbit)
Inhalative, LC50/4h: > 18,18 mg/l (rat)

71-36-3 Butan-1-ol
Oral, LD50: 2292 mg/kg (rat)
Dermal, LD50: 3430 mg/kg (Rabbit)
Inhalative, LC50/4h: 8000 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)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
  Repeated exposure may cause skin dryness or cracking.
  Irritant to skin and mucous membranes.
- **Serious eye damage/irritation**
  Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation**
  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 Dam. 1 - H318 Causes serious eye damage.
  STOT SE 3 - H336 May cause drowsiness or dizziness.
  EUH066 Repeated exposure may cause skin dryness or cracking.

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- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity**
  Based on available data, the classification criteria are not met.
- **Carcinogenicity**
  Based on available data, the classification criteria are not met.
- **Reproductive toxicity**
  Based on available data, the classification criteria are not met.
- **STOT-single exposure**
  STOT SE 3 - H336 May cause drowsiness or dizziness.
- **STOT-repeated exposure**
  Based on available data, the classification criteria are not met.
- **Aspiration hazard**
  Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**

123-86-4 N-butyl acetate
Dermal, L(E)C50: 18 mg/l (fish)
Dermal, L(E)C50: 675 mg/l (alga)
Dermal, L(E)C50: 44 mg/l (daphnie)
Dermal, NOEC: 200 mg/l (alga)

108-21-4 isopropyl acetate
Dermal, L(E)C50: 360 mg/l (fish)
Dermal, L(E)C50: 370 mg/l (alga)
Dermal, L(E)C50: > 1000 mg/l (daphnie)

67-63-0 Propan-2-ol
Dermal, L(E)C50: 9640 mg/l (fish)
Dermal, L(E)C50: 13299 mg/l (daphnie)

107-98-2 1-methoxy-2-propanol
Dermal, L(E)C50: > 1000 mg/l (fish)
Dermal, L(E)C50: > 1000 mg/l (alga)
Dermal, L(E)C50: 23300 mg/l (daphnie)

64742-49-0 Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
Dermal, L(E)C50: 4,6 - 10,0 mg/l (daphnie)

141-78-6 ethyl acetate
Dermal, L(E)C50: 230 mg/l (fish)
Dermal, L(E)C50: 3300 mg/l (alga)
Dermal, L(E)C50: 610 mg/l (daphnie)
Dermal, NOEC: 2,4 mg/l (daphnie)

78-83-1 iso-butanol
Dermal, L(E)C50: 1430 mg/l (fish)
Dermal, L(E)C50: 1250 mg/l (alga)
Dermal, L(E)C50: 1100 mg/l (daphnie)
Dermal, NOEC: 53 mg/l (alga)
Dermal, NOEC: 20 mg/l (daphnie)

71-36-3 Butan-1-ol
Dermal, L(E)C50: 1730-1910 mg/l (fish)
Dermal, L(E)C50: > 500 mg/l (alga)
Dermal, L(E)C50: 1983 mg/l (daphnie)

64-17-5 ethanol
Dermal, L(E)C50: 15300 mg/l (fish)
Dermal, L(E)C50: > 10000 mg/l (daphnie)

- **12.2 Persistence and degradability**
  No further relevant information available.
- **12.3 Bioaccumulative potential**

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No further relevant information available.

- **12.4 Mobility in soil**
No further relevant information available.
- **Ecotoxical effects:**
- **Remark:**
Harmful to fish
- **Additional ecological information:**
- **General notes:**
Harmful to aquatic organisms.
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **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:**
08 01 11 waste paint and varnish containing organic solvents or other hazardous substances
- **European waste catalogue**

```
08
WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF
COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS
AND PRINTING INKS
08 01
wastes from MFSU and removal of paint and varnish
08 01 11
waste paint and varnish containing organic solvents or other hazardous
substances
```

- **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.
- **Recommended cleansing agents:**
Nitrocellulose-Lacquer-Thinner 790

SECTION 14: Transport information

- **14.1 UN-Number**

ADR	UN1263
IMDG	UN1263
IATA	UN1263
ADR	1263 PAINT (ISOPROPYL ACETATE)
IMDG	PAINT
IATA	PAINT

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• **14.3 Transport hazard class(es)**

ADR

Class 3 Flammable liquids.

Label

IMDG

Class 3 Flammable liquids.

Label

IATA

Class 3 Flammable liquids.

Label

• **14.4 Packing group**

ADR III

IMDG III

IATA III

• **14.5 Environmental hazards:**

Special marking (ADR): Laut ADR 2.2.3.1.4 wird Produkt in VP III eingeordnet.

• **14.6 Special precautions for user**

Warning: Flammable liquids.

Danger code (Kemler): 33

EMS Number: F-E,S-E

• **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): E1

Limited quantities (LQ) 5L

Transport category 3

Tunnel restriction code D/E

IMDG

Limited quantities (LQ) 5L

Excepted quantities (EQ) E1

• **UN "Model Regulation":**

UN 1263 PAINT (ISOPROPYL ACETATE), 3, III

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SECTION 15: Regulatory information

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

- **Labelling according to EU guidelines:**
  The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **REGULATION (EC) No 1907/2006 ANNEX XVII**
  Conditions of restriction: 3

- **National regulations:**

- **Information about limitation of use:**
  Pregnant and breastfeeding women and young persons.
- **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
  Butan-1-ol
  ethyl acetate
  ethanol
  Isobutanol
  Propan-2-ol
  isopropyl acetate
  Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
  1-methoxy-2-propanol
  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:
3

SECTION 16: Other information

- **Other information:**
- **Reasons for changes**
  P-statements were adjusted according to the classification.
- **Relevant phrases**

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

- **Classification according to Regulation (EC) No 1272/2008**
  The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

- **Department issuing MSDS:**
  Laboratory / Department of Material Safety Data Sheets: Phone: +49 69 89 00 7 - 104 / Fax: +49 69 89 00 7 - 48104/ E-Mail: cosima.sattler@clou.de

- **Information:**

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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)
VOC: Volatile Organic Compounds (USA, EU)
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
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
- *** Data compared to the previous version altered.**