

MATERIAL SAFETY DATA SHEET
as per 1907/2006/EC, Article 31

268300
Reviewed on: 19.05.2009
Printing date: 19.05.2009

01 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:**
Zapon lacquer (Metal varnish)
- **SDB-group**
18361
- **Application of the substance / the preparation**
Metal Varnish
- **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
- **Information in case of emergency:**
Giftinformationszentrum - Nord
Universitätsklinikum
Bereich Humanmedizin
Robert Koch Str.40
37075 Göttingen
Deutschland
Tel.: + 49 551 / 1 92 40

02 Hazards identification

- **Hazard description:**



F Highly flammable



Xi Irritant

- **Information concerning particular hazards for human and environment:**

R 11 Highly flammable.
R 36 Irritating to eyes.
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 66 Repeated exposure may cause skin dryness or cracking.
R 67 Vapours may cause drowsiness and dizziness.
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.
Has a narcotizing effect.

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03 Composition/information on ingredients

- **Chemical characterization**
- **Description:**
Synthetic resin, cellulose nitrat, organic solvents

- **Dangerous components:**

<i>CAS NO.</i>	<i>Description Index R-phrases</i>	<i>%</i>
123-86-4	<i>n-butyl acetate</i> <i>EINECS: 204-658-1</i> <i>10-66-67</i>	25-50
108-21-4	<i>isopropyl acetate</i> <i>EINECS: 203-561-1</i> <i>F Xi</i> <i>11-36-66-67</i>	10-25
67-63-0	<i>propan-2-ol</i> <i>EINECS: 200-661-7</i> <i>F Xi</i> <i>11-36-67</i>	2,5-10
107-98-2	<i>1-methoxy-2-propanol</i> <i>EINECS: 203-539-1</i> <i>10</i>	2,5-10
64742-49-0	<i>Spezialbenzin 100/140</i> <i>EINECS: 265-151-9</i> <i>F N Xn</i> <i>11-38-51/53-65-67</i>	2,5-10
78-83-1	<i>butanol</i> <i>EINECS: 201-148-0</i> <i>Xi</i> <i>10-37/38-41-67</i>	2,5-10
71-36-3	<i>butan-1-ol</i> <i>EINECS: 200-751-6</i> <i>Xn</i> <i>10-22-37/38-41-67</i>	2,5-10
64-17-5	<i>ethanol</i> <i>EINECS: 200-578-6</i> <i>F</i> <i>11</i>	< 2,5
141-78-6	<i>ethyl acetate</i> <i>EINECS: 205-500-4</i> <i>F Xi</i> <i>11-36-66-67</i>	2,5-10

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

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04 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.

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- 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.

05 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, sand, extinguishing powder. Do not use water.
Foam
- **For safety reasons unsuitable extinguishing agents:**
Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
During heating or in case of fire poisonous gases are produced.
- **Protective equipment:**
Wear self-contained 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.

06 Accidental release measures

- **Person-related safety precautions:**
Protection regulations (see point 7 and 8) to consider.
- **Measures for environmental protection:**
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.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

07 Handling and storage

- **Handling:**
- **Information 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:**
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.

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- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Observe official regulations for the storage of paints and chemicals.
- **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.

08 Exposure controls/personal protection

- **Additional information about design of technical facilities:**
No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**

<i>CAS No.</i>	<i>Designation of material</i>		
123-86-4	<i>n-butyl acetate</i>		
<i>WEL</i>			
	<i>Short-term value</i>	966	<i>mg/m3</i>
		200	<i>ppm</i>
	<i>Long-term value</i>	724	<i>mg/m3</i>
		150	<i>ppm</i>
108-21-4	<i>isopropyl acetate</i>		
<i>WEL</i>			
	<i>Short-term value</i>	849	<i>mg/m3</i>
		200	<i>ppm</i>
67-63-0	<i>propan-2-ol</i>		
<i>WEL</i>			
	<i>Short-term value</i>	1250	<i>mg/m3</i>
		500	<i>ppm</i>
	<i>Long-term value</i>	999	<i>mg/m3</i>
		400	<i>ppm</i>
107-98-2	<i>1-methoxy-2-propanol</i>		
<i>WEL</i>			
	<i>Short-term value</i>	560	<i>mg/m3</i>
		150	<i>ppm</i>
	<i>Long-term value</i>	375	<i>mg/m3</i>
		100	<i>ppm</i>
	<i>Sk</i>		
78-83-1	<i>butanol</i>		
<i>WEL</i>			
	<i>Short-term value</i>	231	<i>mg/m3</i>
		75	<i>ppm</i>
	<i>Long-term value</i>	154	<i>mg/m3</i>
		50	<i>ppm</i>
71-36-3	<i>butan-1-ol</i>		
<i>WEL</i>			
	<i>Short-term value</i>	154	<i>mg/m3</i>
		50	<i>ppm</i>
	<i>Sk</i>		
64-17-5	<i>ethanol</i>		
<i>WEL</i>			
	<i>Long-term value</i>	1920	<i>mg/m3</i>
		1000	<i>ppm</i>
141-78-6	<i>ethyl acetate</i>		
<i>WEL</i>			
	<i>Short-term value</i>	400	<i>ppm</i>
	<i>Long-term value</i>	200	<i>ppm</i>

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- **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 A/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 neoprene / polychloroprene. Degradation effect G to E Instalment of permeation E to ND (< 0.9 µg / cm² / min). Protective factor index: special subject class 6
Clean skin thoroughly after work and put on skin protecting cream.
- **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

* **09 Physical and chemical properties**

<i>General Information</i>		
Form:	Liquid	
Colour:	Colourless	
Odour:	Characteristic	
Change in condition	Phase transfer: fluid - solid	
Boiling point/Boiling range (approximately):	78 °C	
Flash point (approximately):	13 °C	DIN 51 755
Ignition temperature (approximately):	180 °C	
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:	1,80 Vol %	
Upper:	10 Vol %	
Vapour pressure:	50°C < 1.100 hPa	
Density:	0,8800 g/cm ³	
Solubility in / Miscibility with water:	Organic solvents (e.g. n-butyl acetate) Insoluble.	
Viscosity (20°C at the 4 mm beaker according to DIN 53 211)	at 20 °C	70 s DIN 4 mm
VOC value:	782,0 g/l	
Organic solvents (approximately):	90,00 %	
Solids content (approximately):	10,00 %	

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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Dangerous reactions**
Forms explosive gases/fumes.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.
- **Dangerous decomposition products:**
Flammable gases/vapours

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**
 - 123-86-4 *n-butyl acetate***
Oral, LD50: > 8800 mg/kg (rat)
Dermal, LD50: >5000 mg/kg (Rabbit)
Inhalative, LC50/4h: > 21 mg/l (rat)
 - 108-21-4 *isopropyl acetate***
Oral, LD50: 3000 mg/kg (rat)
Oral, LD50: > 6000 mg/kg (Rabbit)
Dermal, LD50: > 10000 mg/kg (Rabbit)
 - 67-63-0 *propan-2-ol***
Oral, LD50: 4750 mg/kg (rat)
Dermal, LD50: 13400 mg/kg (Rabbit)
Inhalative, LC50/4h: 30 mg/l (rat)
 - 107-98-2 *1-methoxy-2-propanol***
Oral, LD50: 7200 mg/kg (rat)
Dermal, LD50: 13000 mg/kg (Rabbit)
Inhalative, LC50/4h: 40 mg/l (Rabbit)
 - 64742-49-0 *Spezialbenzin 100/140***
Oral, LD50: > 2000 mg/kg (rat)
Dermal, LD50: > 2000 mg/kg (Rabbit)
Inhalative, LC50/4h: > 5 mg/l (rat)
 - 78-83-1 *butanol***
Oral, LD50: 2460 mg/kg (rat)
Dermal, LD50: 3400 mg/kg (Rabbit)
 - 71-36-3 *butan-1-ol***
Oral, LD50: 790 mg/kg (rat)
Dermal, LD50: 3400 mg/kg (Rabbit)
Inhalative, LC50/4h: 8000 mg/l (rat)
 - 64-17-5 *ethanol***
Oral, LD50: 7060 mg/kg (rat)
Inhalative, LC50/4h: 39 mg/l (mouse)
 - 141-78-6 *ethyl acetate***
Oral, LD50: 5600 mg/kg (rat)
Oral, LD50: 5620 mg/kg (Rabbit)
Dermal, LD50: > 18000 mg/kg (Rabbit)
Inhalative, LC50/4h: 56 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 sensitizing effects known.
- **Additional toxicological information:**

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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 according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

* **12 Ecological information**

- **General notes:**

Harmful to aquatic organisms

Do not allow product to reach ground water, water course or sewage system.

Water hazard class 1 : slightly hazardous for water

13 Disposal considerations

- **Product:**

- **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.

- **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 dangerous substances

- **Uncleaned packaging:**

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

- **Recommendation:**

Packaging can be reused or recycled after cleaning.

Disposal according to 15 01 04 (metal).

- **Recommended cleansing agents:**

CLOU Cleaning agent thinner, CLOU Nitrocellulose lacquer thinner 790, CLOU DD-Thinner 29

* **14 Transport information**

- **Land transport ADR/RID (cross-border)**

ADR/RID class:

3 Flammable liquids

Danger code (Kemler):

33

UN-Number:

1263

Packaging group:

III

Hazard label:



Description of goods:

1263 PAINT (ISOPROPYL ACETATE)

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Limited quantities (LQ)	LQ7
Transport category	3
Tunnel restriction code	D/E

• **Maritime transport IMDG:**

IMDG Class:	3
UN Number:	1263
Label	



Packaging group:	III
EMS Number:	F-E,S-E
Marine pollutant:	No
Proper shipping name:	PAINT

• **Air transport ICAO-TI and IATA-DGR:**

ICAO/IATA Class:	3
UN/ID Number:	1263
Label	



Packaging group:	III
Proper shipping name:	PAINT

* **15 Regulatory information**

• **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

• **Code letter and hazard designation of product:**



F Highly flammable



Xi Irritant

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

Cellulose nitrateth

• **Risk phrases:**

R 11	Highly flammable.
R 36	Irritating to eyes.
R 52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 66	Repeated exposure may cause skin dryness or cracking.
R 67	Vapours may cause drowsiness and dizziness.

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- **Safety phrases:**

- | | |
|-------|---|
| S 2 | Keep out of the reach of children. |
| S 29 | Do not empty into drains. |
| S 33 | Take precautionary measures against static discharges. |
| S 43h | In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water. |
| S 46 | If swallowed, seek medical advice immediately and show this container or label. |
| S 51 | Use only in well-ventilated areas. |

- **National regulations:**

- **Information about limitation of use:**

Pregnant and breastfeeding women and young persons.

- **Waterhazard class:**

Water hazard class 1 : slightly hazardous for water.

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16 Other information

- **Relevant R-phrases**

- | | |
|---------|---|
| R 10 | Flammable. |
| R 11 | Highly flammable. |
| R 37/38 | Irritating to respiratory system and skin. |
| R 22 | Harmful if swallowed. |
| R 36 | Irritating to eyes. |
| R 66 | Repeated exposure may cause skin dryness or cracking. |
| R 51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R 41 | Risk of serious damage to eyes. |
| R 67 | Vapours may cause drowsiness and dizziness. |
| R 65 | Harmful: may cause lung damage if swallowed. |

- **Information:**

The * sign before major points indicates amendments of the previous version.

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.

Data sheet for issuing department: laboratory, see Point 1

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 or 129.

Please observe work safety measures in items 8 and 15.

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