

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 12.10.2015

Version number 3

Revision: 12.10.2015

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

- **1.1 Product identifier**
- **Trade name: LACOL**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**  
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Application of the substance / the mixture**  
Dry-cleaning  
Spotting agent, stain remover
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
SEITZ GmbH  
Gutenbergstrasse 3  
65830 Kriftel / Germany  
Tel. + 49(0) 6192-9948-0  
Fax + 49(0) 6192-9948-99  
msds@seitz24.com  
www.seitz24.com
- **Further information obtainable from:** msds@seitz24.com
- **1.4 Emergency telephone number:**  
GIZ-Nord, Göttingen, Germany + 49 551 19240  
(Member of EPECS)

### SECTION 2: Hazards identification

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



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02



GHS05



GHS07

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 12.10.2015

Version number 3

Revision: 12.10.2015

**Trade name: Lacol**

(Contd. of page 1)

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
cyclohexanone  
n-butyl acetate  
benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with 3-methoxy-1-propanamine
- **Hazard statements**  
H226 Flammable liquid and vapour.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H336 May cause drowsiness or dizziness.
- **Precautionary statements**  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 Wear protective gloves / eye protection.  
P261 Avoid breathing mist/vapours/spray.  
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.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

#### · 3.2 Mixtures

##### · **Dangerous components:**

CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29-xxxx	n-butyl acetate Flam. Liq. 3, H226; STOT SE 3, H336	< 25%
CAS: 34590-94-8 EINECS: 252-104-2 Reg.nr.: 01-2119450011-60-xxxx	(2-methoxymethylethoxy)propanol substance with a Community workplace exposure limit	< 25%
CAS: 108-94-1 EINECS: 203-631-1 Reg.nr.: 01-2119453616-35-xxxx	cyclohexanone Flam. Liq. 3, H226; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	< 15%
CAS: 85186-10-3 EINECS: 285-993-0 Reg.nr.: Not applicable*	benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with 3-methoxy-1-propanamine Eye Dam. 1, H318; Skin Irrit. 2, H315	< 15%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29-xxxx	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226	< 10%

##### · **Regulation (EC) No 648/2004 - Labelling for contents**

anionic surfactants	5 - 15%
---------------------	---------

##### · **Additional information**

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

This product is an ionic mixture.

For purpose of classification and labelling, the calculation based on the hazardous salts are potentially present in the mixture.

\*exempted according to REACH Article 2(7) and Annex V. Each starting material of the ionic mixture is registered, as required.

Note: under REACH there is no legal requirement to provide justification for absence of

(Contd. on page 3)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 12.10.2015

Version number 3

Revision: 12.10.2015

**Trade name: Lacol**

Registration number. This is provided for clarity and consistency reasons.

(Contd. of page 2)

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information**  
Remove casualties from exposure.  
Keep unprotected persons away.  
Immediately remove any clothing soiled by the product.
- **After inhalation**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact**  
Immediately rinse with water.  
If skin irritation continues, consult a doctor.
- **After eye contact**  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**  
Headache  
Disziness  
Nausea  
Unconsciousness
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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:**  
Do not inhale explosion gases or combustion gases.  
Wear self-contained respiratory protective device.
- **Additional information**  
Cool endangered receptacles with water spray.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Avoid contact with skin and eyes.  
Keep away from ignition sources  
Ensure adequate ventilation  
Do not breathe gases/ vapours.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 12.10.2015

Version number 3

Revision: 12.10.2015

Trade name: **Lacol**

(Contd. of page 3)

- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Keep away from heat and direct sunlight.  
Avoid contact with eyes and skin.  
Ensure good ventilation/exhaustion at the workplace.  
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Formation of explosive vapour- / air mixture possible.  
Protect against electrostatic charges.  
Flammable gas-air mixtures may form in empty receptacles.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**  
Store only in the original receptacle.  
Prevent any seepage into the ground.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Store away from oxidising agents.  
Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**  
Protect from heat and direct sunlight.  
Store in cool, dry conditions in well sealed receptacles.  
Store receptacle in a well ventilated area.  
Protect from frost.  
Time of storage: max. 12 month
- **7.3 Specific end use(s)** Dry-cleaning

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

<b>Ingredients with limit values that require monitoring at the workplace:</b>	
<b>123-86-4 n-butyl acetate</b>	
WEL	Short-term value: 966 mg/m <sup>3</sup> , 200 ppm Long-term value: 724 mg/m <sup>3</sup> , 150 ppm
<b>34590-94-8 (2-methoxymethylethoxy)propanol</b>	
WEL	Long-term value: 308 mg/m <sup>3</sup> , 50 ppm Sk
<b>108-94-1 cyclohexanone</b>	
WEL	Short-term value: 82 mg/m <sup>3</sup> , 20 ppm Long-term value: 41 mg/m <sup>3</sup> , 10 ppm Sk, BMGV

(Contd. on page 5)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 12.10.2015

Version number 3

Revision: 12.10.2015

Trade name: **Lacol**

(Contd. of page 4)

**108-65-6 2-methoxy-1-methylethyl acetate**

WEL	Short-term value: 548 mg/m <sup>3</sup> , 100 ppm Long-term value: 274 mg/m <sup>3</sup> , 50 ppm Sk
-----	--

- **Ingredients with biological limit values:**

**108-94-1 cyclohexanone**

BMGV	2 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: cyclohexanol
------	--

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Personal protective equipment**

- **General protective and hygienic measures**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Do not eat, drink, smoke or sniff while working.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / vapours / aerosols.

- **Respiratory protection:**

Ensure good ventilation/exhaustion at the workplace.

Use suitable respiratory protective device in case of insufficient ventilation (exceeding the workplace limit values, formation of aerosols).

Combination filter ABEK-P2

- **Protection of hands:**

Solvent resistant gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Material of gloves**

PE/EVAL/PE

Butyl rubber, BR

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.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

PE/EVAL/PE

Recommended thickness of the material:  $\geq 0.4$  mm

- **Eye protection:** Tightly sealed goggles.

- **Body protection:** Solvent resistant protective clothing

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Fluid

(Contd. on page 6)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.10.2015

Version number 3

Revision: 12.10.2015

Trade name: **Lacol**

(Contd. of page 5)

· <b>Colour:</b>	Yellow
· <b>Odour:</b>	Solvent-like
· <b>Odour threshold:</b>	No further relevant information available.
· <b>pH-value (100 g/l) at 20 °C:</b>	~ 7.0
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	undetermined
<b>Boiling point/Boiling range:</b>	undetermined
· <b>Flash point:</b>	36 °C (EN 22719)
· <b>Flammability (solid, gaseous)</b>	No further relevant information available.
· <b>Ignition temperature:</b>	No further relevant information available.
· <b>Decomposition temperature:</b>	No further relevant information available.
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	No further relevant information available.
<b>Upper:</b>	No further relevant information available.
· <b>Oxidising properties</b>	No further relevant information available.
· <b>Vapour pressure:</b>	No further relevant information available.
· <b>Density at 20 °C:</b>	~ 0.97 g/cm <sup>3</sup> (ISO 2811)
· <b>Relative density</b>	No further relevant information available.
· <b>Vapour density</b>	No further relevant information available.
· <b>Evaporation rate</b>	No further relevant information available.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix
· <b>Segregation coefficient (n-octanol/water):</b>	No further relevant information available.
· <b>Viscosity:</b>	
<b>dynamic:</b>	No further relevant information available.
<b>kinematic:</b>	No further relevant information available.
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**  
Stable under normal ambient conditions.  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** Forms flammable gases / fumes
- **10.4 Conditions to avoid**  
Protect from heat and direct sunlight.  
Keep away from ignition sources
- **10.5 Incompatible materials:** Strong oxidizing agents
- **10.6 Hazardous decomposition products:** None if used as directed.

GB

(Contd. on page 7)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 12.10.2015

Version number 3

Revision: 12.10.2015

Trade name: **Lacol**

(Contd. of page 6)

### SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity

- LD/LC50 values relevant for classification:

#### 123-86-4 n-butyl acetate

Oral	LD50	10760 mg/kg (rat) (OECD 423)
Dermal	LD50	> 14112 mg/kg (rabbit) (OECD 402)
Inhalative	LC50 (4h)	23.4 mg/l (rat) (OECD 403)

#### 34590-94-8 (2-methoxymethylethoxy)propanol

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	9500 mg/kg (rabbit)
Inhalative	LC50 (7h)	> 500 mg/l (rat)

#### 108-94-1 cyclohexanone

Oral	LD50	1530 mg/kg (rat)
Dermal	LD50	948 mg/kg (rabbit)
Inhalative	LC50 (4h)	10.7 mg/l (rat)

#### 85186-10-3 benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with 3-methoxy-1-propanamine

Oral	LD50	2550 mg/kg (Rat)
------	------	------------------

#### 108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)
Inhalative	LC50 (4h)	> 5 mg/l (rat)

- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, 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**  
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

EC50	647.7 mg/l (Aquatic plants, algae) (Desmodesmus subspicatus; 72h)
	44 mg/l (Aquatic invertebrates) (Daphnia magna; 48h)
LC50	18 mg/l (Fish) (Pimephales promelas; 96h; OECD 203)
NOEC	200 mg/l (Aquatic plants, algae) (Desmodesmus subspicatus)

(Contd. on page 8)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 12.10.2015

Version number 3

Revision: 12.10.2015

Trade name: **Lacol**

(Contd. of page 7)

**34590-94-8 (2-methoxymethylethoxy)propanol**

EC50	> 969 mg/l (Aquatic plants, algae) (96 h; Scenedesmus capricornutum)
	1919 mg/l (Aquatic invertebrates) (48 h; Daphnia)
LC50	> 10000 mg/l (Fish) (96 h; Pimephales promelas)

**108-94-1 cyclohexanone**

EC5	192 mg/l (Aquatic plants, algae) (Scenedesmus quadricauda; 192 h)
EC50	820 mg/l (Aquatic invertebrates) (Daphnia magna; 24 h)
LC50	527 mg/l (Fish) (Pimephales promelas; 96 h)

**108-65-6 2-methoxy-1-methylethyl acetate**

EC50	> 1000 mg/l (Aquatic plants, algae) (72 h; Selenastrum capricornutum; OECD 201)
	> 500 mg/l (Aquatic invertebrates) (48 h; Daphnia magna)
LC50	134 mg/l (Fish) (96 h; Oncorhynchus mykiss; OECD 203)
NOEC	47.5 mg/l (Fish) (14 d; Oryzias latipes; OECD 204)
	≥ 100 mg/l (Aquatic invertebrates) (21 d; Daphnia magna; OECD 202)

- **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, even in small quantities.  
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
- **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** Disposal must be made according to official regulations.
- **Waste disposal key:**  
The assignment of waste codes in accordance with European Waste Catalogue (EWC) is trade- and process-specific and has to be made in compliance with national and local regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- |                                       |   |
|---------------------------------------|---|
| • <b>14.1 UN-Number</b>               |   |
| • <b>ADR, IMDG, IATA</b>              | UN1993  |
| • <b>14.2 UN proper shipping name</b> |   |
| • <b>ADR</b>                          | 1993 FLAMMABLE LIQUID, N.O.S. (BUTYL ACETATES, CYCLOHEXANONE) |
| • <b>IMDG, IATA</b>                   | FLAMMABLE LIQUID, N.O.S. (BUTYL ACETATES, CYCLOHEXANONE)      |

(Contd. on page 9)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.10.2015

Version number 3

Revision: 12.10.2015

Trade name: **Lacol**

(Contd. of page 8)

- **14.3 Transport hazard class(es)**

- **ADR**



- **Class** 3 (F1) Flammable liquids.
- **Label** 3

- **IMDG, IATA**



- **Class** 3 Flammable liquids.
- **Label** 3

- **14.4 Packing group**

- **ADR, IMDG, IATA** III

- **14.5 Environmental hazards:** Not applicable.

- **14.6 Special precautions for user**

- **Warning:** Flammable liquids.
- **Danger code (Kemler):** 30
- **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:**

- **ADR**

- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml
- **Transport category** 3
- **Tunnel restriction code** D/E

- **IMDG**

- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml

- **UN "Model Regulation":**

UN1993, FLAMMABLE LIQUID, N.O.S. (BUTYL ACETATES, CYCLOHEXANONE), 3, III

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Other regulations, limitations and prohibitive regulations**
- **Other information:** Product is for professional use only.

(Contd. on page 10)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 12.10.2015

Version number 3

Revision: 12.10.2015

Trade name: **Lacol**

(Contd. of page 9)

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H336 May cause drowsiness or dizziness.

- **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)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- 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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Flam. Liq. 3: Flammable liquids, Hazard Category 3
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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