

# Safety Data Sheet

Version No. 01/EN  
Revision NA  
Printing date Apr 18, 2019

(according to Regulation EC 1907/2006)

## 1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

Trade name

Registration no. Not Available

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

Identified uses For White Board Marker

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

Company

Telephone

E-mail

### 1.4 Emergency telephone number

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Flammable liquid, Category 2

Eye irritation, Category 2

### 2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

- Hazard pictograms



- Signal word:

DANGER

- Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

- Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 Ground/bond container and receiving equipment.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

- Response

Remove contact lenses, if present and easy to do. Continue rinsing.

- Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

### 2.3. Other hazards

None known




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## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Mixture

Components	%	Classification	
Ethanol (CAS No; 64-17-5)	70	Flammable liquid, Category 2, Eye irritation, Category 2	 
Di-iso-octyl sebacate (CAS No; 27214-90-0)	5	Acute toxicity, Oral; Category 4 Skin irritation; Category 2, Eye irritation; Category 2 STOT- single exposure; Category 3	
Butyl stearate (CAS No; 123-95-5)	5	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.	-
Bis(2-ethylhexyl) adipate (CAS No; 103-23-1)	5	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.	-
Methyl (propylhydroxide, ethoxylated) bis (trimethylsiloxy) silane (CAS No; 67674-67-3)	5	Not classified	-
Others	10	-	-

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

Inhalation	Fresh air. Remove from exposure and move to fresh air immediately
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/ shower.
Eye contact	Rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
Ingestion	Immediately make victim drink water (two glasses at most). Consult a physician.

### 4.2 Most important symptoms / effects, acute and delayed

irritant effects, respiratory paralysis, Dizziness, narcosis, inebriation, euphoria, Nausea, Vomiting

## 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media	Carbon dioxide (CO <sub>2</sub> ), Foam, Dry powder, Water
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.

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

Combustible. Pay attention to flashback. Forms explosive mixtures with air at ambient temperatures.

Vapours are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

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## 6. ACCIDENTAL RELEASE MEASURES

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

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, and consult an expert.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

*Advice on safe handling*

Observe label precautions.

*Advice on protection against fire and explosion*

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

*Hygiene measures*

Change contaminated clothing. Wash hands after working with substance.

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

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Occupational exposure limits

No data available

### 8.2 Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

### 8.3 Personal protection equipment

Respiratory protection

Required when vapours/aerosols are generated. Filter A (acc. to DIN 3181) for vapours of organic compounds. The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

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Hand protection                      Glove material:butyl-rubber  
    Glove thickness:0,7 mm  
    Break through time:> 480 min

Eye / face protection                Safety glasses

Body protection                        -

## 9. PHYSICAL & CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

physical & chemical properties	Ethanol	Di-iso-octyl sebacate	Butyl stearate	Bis(2-ethylhexyl) adipate	Methyl (propylhydroxide, ethoxylated) bis (trimethylsiloxy) silane
Appearance	liquid	No Data	liquid	liquid	liquid
Odour	alcohol-like	No Data	No Data	No Data	No Data
Odour threshold	0.1–5058.5 ppm	No Data	No Data	No Data	No Data
pH	7.0	No Data	No Data	No Data	No Data
Melting point/ Freezing point	-114.5°C	No Data	17-22 °C	-70 °C	-18 °C
Boiling point and range	78.3°C	428°C	343°C	175 °C	> 205 °C
Flash point	12°C	No Data	160°C	196 °C	118 °C
Evaporation rate	No Data	No Data	No Data	No Data	No Data
Flammability (solid, gas)	No Data	No Data	No Data	No Data	No Data
Upper/lower flammability or explosive limits	3.1%(v)/27.7%(v)	No Data	No Data	No Data	No Data
Vapor pressure	59 hPa	No Data	No Data	No Data	No Data
Vapor density	1.6	No Data	No Data	No Data	No Data
Relative density	0.79~0.793g/cm3	No Data	0.861 g/mL	0.925 g/cm3	1.02
Solubility	completely miscible	Slightly soluble.	No Data	Slightly soluble.	Insoluble
Partition coefficient: n-octanol/water	log Pow: -0.31	No Data	No Data	log Pow: 8.94	No Data
Auto-ignition temperature	No Data	No Data	No Data	377 °C	No Data
Decomposition temperature	No Data	No Data	No Data	No Data	No Data
Viscosity	1.2 mPa.s	No Data	No Data	No Data	No Data
Explosive properties	Not classified	No Data	No Data	No Data	No Data
Oxidizing properties	No Data	No Data	No Data	No Data	No Data

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stability

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

hydrogen peroxide, perchlorates, perchloric acid, Nitric acid, mercury(II) nitrate, permanganic acid, Nitriles, peroxy compounds, Strong oxidizing agents, nitrosyl compounds, Peroxides, sodium, Potassium, halogen oxides, calcium hypochlorite, nitrogen dioxide, metallic oxides, uranium hexafluoride, iodides, Chlorine, Alkali metals, Alkaline earth metals, alkali oxides, Ethylene oxide, silver, with, Nitric acid, silver compounds, with, Ammonia, potassium permanganate, with, conc. sulfuric acid, Risk of ignition or formation of inflammable gases or vapours with: halogen-halogen compounds, chromium(VI) oxide, chromyl chloride, Fluorine, hydrides, Oxides of phosphorus, platinum Nitric acid, with, potassium permanganate

### 10.4 Conditions to avoid

Warming.

### 10.5 Incompatible materials

rubber, various plastics

### 10.6 Hazardous decomposition products

no information available

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Routes of exposure

No data available

- Benzyl alcohol

May cause respiratory irritation. May cause burns.

May cause irritation (possibly severe). Burns, tearing may occur.

- m-xylene-a,a-diamine

May cause irritation, blood pressure change, nausea, vomiting, diarrhea, stomach pain, dyspnea, headache, drowsiness, dizziness, loss of coordination, convulsions, unconsciousness. May cause irritation, blurred vision, and eye damage.

### 11.2 Information on toxicological effects

Acute toxicity

No relevant information found.

- Ethanol (64-17-5)

- Oral; LD50 Rat: 10.470 mg/kg OECD Test Guideline 401

- Butyl stearate (123-95-5)

- Inhalation; LC50 Rat: 124,7 mg/l; 4 h ; vapour OECD Test Guideline 403

- Oral; LD50 Oral - Rat - 32,000 mg/kg

- Bis(2-ethylhexyl) adipate (103-23-1)

- LD50 Oral - Rat - female - 24,600 mg/kg(Bis(2-ethylhexyl) adipate); (OECD Test Guideline 401)

- LD50 Dermal - Rabbit - 14,800 mg/kg(Bis(2-ethylhexyl) adipate)

- Methyl (propylhydroxide, ethoxylated) bis(trimethylsiloxy) silane (67674-67-3)

- Oral; 1500 mg/kg

Skin corrosion/irritation:

No relevant information found.

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- Ethanol (64-17-5)	- No skin irritation (OECD Test Guideline 404)
Serious eye damage/irritation	No relevant information found.
- Ethanol (64-17-5)	- Causes serious eye irritation. (OECD Test Guideline 405)
Respiratory or skin sensitisation	No relevant information found.
- Ethanol (64-17-5)	- Local lymph node assay (LLNA) Mouse - Result: negative (Method: OECD Test Guideline 429)
Germ cell mutagenicity	No relevant information found.
- Ethanol (64-17-5)	- Genotoxicity in vitro; Ames test Result: negative (Method: OECD Test Guideline 471)
- Bis(2-ethylhexyl) adipate (103-23-1)	- In vitro mammalian cell gene mutation test Mouse lymphoma test Result: negative (Method: OECD Test Guideline 476)
Carcinogenicity	- Ames test(Bis(2-ethylhexyl) adipate)S. typhimurium - Result: negative
- Bis(2-ethylhexyl) adipate (103-23-1)	No relevant information found.
Reproductive toxicity	- IARC Group 3: Not classifiable as to its carcinogenicity to humans
- Ethanol (64-17-5)	No relevant information found.
STOT-single exposure	- Oral; Mouse Method: OECD Test Guideline 416
STOT-repeated exposure	No relevant information found.
Aspiration hazard	No relevant information found.

## 12. ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

- Ethanol (64-17-5)
- No relevant information found.
- Toxicity to fish:  
flow-through test EC50 *Pimephales promelas* (fathead minnow): 15.300 mg/l; 96 h  
Analytical monitoring: yes
  - Toxicity to daphnia and other aquatic invertebrates  
EC50 *Daphnia magna* (Water flea): 9.268 - 14.221 mg/l; 48 h (IUCLID)
  - Toxicity to algae  
IC50 *Scenedesmus quadricauda* (Green algae): 5.000 mg/l; 7 d
  - Toxicity to bacteria  
EC50 *Pseudomonas putida*: 6.500 mg/l; 16 h (IUCLID)
  - Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)  
semi-static test NOEC *Daphnia magna* (Water flea): 9,6 mg/l; 9 d (ECHA)
  - static test LC0 - *Oncorhynchus mykiss* (rainbow trout) - > 0.78 mg/l – 96 h(Bis(2-ethylhexyl) adipate)
  - Immobilization EC50 - *Daphnia magna* (Water flea) - > 500 mg/l - 48 h(Bis(2-ethylhexyl) adipate) (OECD Test Guideline 202)
  - static test EC50 - *Desmodesmus subspicatus* (*Scenedesmus subspicatus*) - > 500 mg/l - 72 h(Bis(2-ethylhexyl) adipate)
  - EC50 - Sludge Treatment - > 350 mg/l - 3 h(Bis(2-ethylhexyl) adipate)
- Bis(2-ethylhexyl) adipate (103-23-1)

### 12.2 Persistence and degradability

- Ethanol (64-17-5)
- No relevant information found.
- Biodegradability 94 % (OECD Test Guideline 301E): Readily biodegradable  
Biochemical Oxygen Demand (BOD) 930 - 1.670 mg/g (5 d)  
Theoretical oxygen demand (ThOD) 2.100 mg/g  
Ratio COD/ThBOD 90 %  
aerobic - Exposure time 28 d(Bis(2-ethylhexyl) adipate)  
Result: 90 - 100 % - Readily biodegradable (OECD Test Guideline 301F)
- Bis(2-ethylhexyl) adipate (103-23-1)
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## 12.3 Bioaccumulative potential

- Ethanol (64-17-5)
- Bis(2-ethylhexyl) adipate (103-23-1)

No relevant information found.

Partition coefficient: n-octanol/water log Pow: -0,31  
Lepomis macrochirus - 28 d - 250 µg/l(Bis(2-ethylhexyl) adipate)  
Bioconcentration factor (BCF): 27

## 12.4 Mobility in soil

No relevant information found.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Disposal instructions

See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

### 13.2 Waste from residues / unused products

No data available

### 13.3 Contaminated packaging

No data available

## 14. TRANSPORT INFORMATION

### 14.1 UN number

- Ethanol (64-17-5) UN 1170

### 14.2 UN proper shipping name

- Ethanol (64-17-5) ETHANOL

### 14.3 Transport hazard class(es)

- Ethanol (64-17-5) 3

### 14.4. Packing group

- Ethanol (64-17-5) II

### 14.5. Environmental hazards

- Ethanol (64-17-5) --

### 14.6. Transport in bulk

Not relevant

### 14.7. International shipping information

Not relevant

## 15. REGULATORY INFORMATION

### 15.1 Regulatory information

No data available

### 15.2 Chemical Safety Assessment:

For this product a chemical safety assessment was not carried out.

### 15.3 Inventory status

No data available

## 16. OTHER INFORMATION

The contents and format of this MSDS/SDS are in accordance with Regulation (EC) No 1907/2006.

### • References

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Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

Corporate Solution From Thomson Micromedex (<http://csi.micromedex.com>)

ECB-ESIS(European chemical Substances Information System)(<http://ecb.jrc.it/esis>)

ECOTOX Database, EPA(<http://cfpub.epa.gov/ecotox>)

IUCLID Chemical Data Sheet, EC-ECB

International Chemical Safety Cards(ICSC)(<http://www.nihs.go.jp/ICSC>)

TOXNET, U.S. National Library of Medicine(<http://toxnet.nlm.nih.gov>)

The Chemical Database, The Department of Chemistry at the University of Akron  
(<http://ull.chemistry.uakron.edu/erd>)



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- **Abbreviation and acronyms**

CLP: Regulation No. 1272/2008 on Classification, Labelling and Packaging of substances and mixtures

EC: European Community

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

STOT: Specific target organ toxicity

- **Disclaimer of Liability**

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