



SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.40

Section 1 - Product and Company Information

Product Name: 2-Butoxyethyl acetate, 99%
Product Number: 537519
Brand: Aldrich Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
Fax: 800 325 5052
Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Table with 5 columns: Substance Name, CAS #, SARA 313, EC no, Annex I Index Number. Row 1: 1-ACETOXY-2-BUTOXYETHANE, 112-07-2, Yes, 203-933-3, 607-038-00-2

Formula: C8H16O3
Synonyms: Acetic acid, 2-butoxyethyl ester, 2-Butoxyethanol acetate, 2-Butoxyethyl acetate, 2-Butoxyethylester kyseliny octove (Czech), Butyl cellosolve acetate, Butylcelosolvacetat (Czech), Butylglycol acetate, Ektasolve EB acetate, Ethylene glycol monobutyl ether acetate, Glycol monobutyl ether acetate

Section 3 - Hazards Identification

Emergency Overview
Harmful.
May form explosive peroxides. Harmful by inhalation and in contact with skin. Irritating to eyes, respiratory system and skin.
Combustible liquid. Readily absorbed through skin. Target organ(s): Blood. Kidneys.

HMIS Rating: Health: 1\*, Flammability: 2, Reactivity: 0
NFPA Rating: Health: 1, Flammability: 2, Reactivity: 0

\*additional chronic hazards present.
For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure: If swallowed, wash out mouth with water provided person is conscious. Call a physician.
Inhalation Exposure: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Explosion Hazards: May form peroxides of unknown stability.
Flash Point: 169 °F, 76 °C
Explosion Limits: Lower: 0.88 %, Upper: 8.54 %
Autoignition Temp: 340 °C
Extinguishing Media: Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
Firefighting Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Combustible liquid. Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill: Evacuate area.
Procedure(s) of Personal Precaution(s): Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.
Methods for Cleaning Up: Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling: User Exposure: Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
Storage: Suitable: Keep tightly closed. Keep away from heat, sparks, and open flame. Store in a cool dry place.
Unsuitable: Minimize exposure to air. If peroxide formation is suspected, do not open or move container.

## Section 8 - Exposure Controls / PPE

### Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

### Personal Protective Equipment

#### Respiratory

Government approved respirator.

#### Hand

Compatible chemical-resistant gloves.

#### Eye

Chemical safety goggles.

### General Hygiene Measures

Wash contaminated clothing before reuse. Wash thoroughly after handling.

### Exposure Limits

Country	Type	Value
Poland	NDS	100 MG/M3
Poland	NDSch	
Poland	NDSP	

### Exposure Limits, RTECS

Country	Source	Type	Value
USA	NIOSH	TWA	5 PPM (SK)

## Section 9 - Physical/Chemical Properties

### Appearance

Physical State	Color
Clear liquid	Colorless

Molecular Weight: 160.22 AMU

Property	Value	At Temperature or Pressure
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pH	N/A	
BP/BP Range	192 °C	760 mmHg
MP/MP Range	N/A	
Freezing Point	N/A	
Vapor Pressure	0.29 mmHg	20 °C
Vapor Density	5.5 g/l	
Saturated Vapor Conc.	N/A	
SG/Density	0.94 g/cm3	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point °F	169 °F	
Flash Point °C	76 °C	Method: closed cup
Explosion Limits	Lower: 0.88 % Upper: 8.54 %	33 °C 135 °C Method: closed cup
Flammability	N/A	
Autoignition Temp	340 °C	
Refractive Index	1.414	

Solubility N/A

N/A = not available

## Section 10 - Stability and Reactivity

### Stability

Stable

Stable.

### Conditions of Instability

Upon exposure to air, product may slowly degrade, forming peroxides, which can be unstable

### Materials to Avoid

Strong oxidizing agents, Strong bases.

### Hazardous Decomposition Products

#### Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide.

### Hazardous Polymerization

#### Hazardous Polymerization

Will not occur.

## Section 11 - Toxicological Information

### Route of Exposure

#### Skin Contact

Causes skin irritation.

#### Skin Absorption

Harmful if absorbed through skin. Readily absorbed through skin.

#### Eye Contact

Causes eye irritation.

#### Inhalation

Harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

#### Ingestion

May be harmful if swallowed.

### Target Organ(s) or System(s)

Blood, Kidneys, Female reproductive system, Male reproductive system.

### Signs and Symptoms of Exposure

In laboratory studies with this material, birth defects, fetotoxicity, embryolethality, anemia, bone marrow damage, hemolysis, immunosuppression, and damage to the male reproductive tissues have been observed.

RTECS Number: KJ8925000

### Toxicity Data

Oral - Rat: 2400 mg/kg (LD50)

Remarks: Kidney, Ureter, Bladder:Hematuria.

Kidney, Ureter, Bladder:Other changes in urine composition.

Oral - Mouse: 3200 mg/kg (LD50)

Skin - Rabbit: 1500 mg/kg (LD50)

Remarks: Kidney, Ureter, Bladder:Hematuria.

Kidney, Ureter, Bladder:Other changes in urine composition.

Blood:Normocytic anemia.

### Irritation Data

Skin - Rabbit: 500 mg

Remarks: Open irritation test

Eyes - Rabbit: 500 mg 24H

Remarks: Mild irritation effect

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

### Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.  
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.  
Observe all federal, state, and local environmental regulations.

## Section 14 - Transport Information

### DOT

**Proper Shipping Name:** Combustible liquid, n.o.s.  
**UN#:** 1993  
**Class:** COMBUSTIBLE LIQUID  
**Packing Group:** Packing Group III  
**Hazard Label:** None  
**PIH:** Not PIH

### IATA

**Non-Hazardous for Air Transport:** Non-hazardous for air transport.

## Section 15 - Regulatory Information

### EU Directives Classification

**Symbol of Danger:** Xn  
**Indication of Danger**  
Harmful.  
**Risk Statements** R: 20/21  
Harmful by inhalation and in contact with skin.  
**Safety Statements** S: 24  
Avoid contact with skin.

### US Classification and Label Text

**Indication of Danger**  
Harmful.  
**Risk Statements**  
May form explosive peroxides. Harmful by inhalation and in contact with skin. Irritating to eyes, respiratory system and skin.  
**Safety Statements**  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.  
**US Statements**  
Combustible liquid. Readily absorbed through skin. Target organ(s): Blood. Kidneys.

### United States Regulatory Information

**SARA Listed:** Yes  
**Demimis:** 1.0 %  
**Notes:** This product is subject to SARA section 313 reporting requirements - glycol ethers.

**TSCA Inventory Item:** Yes

### Canada Regulatory Information

**WHMIS Classification**  
This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.  
**DSL:** Yes  
**NDSL:** No

## Section 16 - Other Information

### Disclaimer

For R&D use only. Not for drug, household or other uses.

### Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

