

## MATERIAL SAFETY DATA SHEET

Date Printed: 07/22/2004

Date Updated: 05/25/2004

Version 1.5

## Section 1 - Product and Company Information

Product Name 2-BUTOXYETHYL ACETATE, 99%  
Product Number 307289  
Brand ALDRICH

Company Sigma-Aldrich  
Street Address 3050 Spruce Street  
City, State, Zip, Country SAINT LOUIS MO 63103 US  
Technical Phone: 314 771 5765  
Emergency Phone: 414 273 3850 Ext. 5996  
Fax: 800 325 5052

## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
1-ACETOXY-2-BUTOXYETHANE	112-07-2	Yes

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

RTECS Number: KJ8925000

## 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.

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### Section 5 - Fire Fighting Measures

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#### FLAMMABLE HAZARDS

Peroxide Former: Yes

#### EXPLOSION HAZARDS

May form peroxides of unknown stability.

#### FLASH POINT

169 °F 76 °C Method: closed cup

#### EXPLOSION LIMITS

Lower: 0.88 % Upper: 8.54 %

#### AUTOIGNITION TEMP

340 °C

#### FLAMMABILITY

N/A

#### 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.

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### Section 6 - Accidental Release Measures

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#### 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.



Decomposition Temp.	N/A	
Flash Point	169 °F 76 °C	Method: closed cup
Explosion Limits	Lower: 0.88 % Upper: 8.54 %	
Flammability	N/A	
Autoignition Temp	340 °C	
Refractive Index	1.414	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

N/A = not available

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## Section 10 - Stability and Reactivity

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### 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

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## Section 11 - Toxicological Information

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### 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, embryoletality, anemia, bone marrow damage, hemolysis, immunosuppression, and damage to the male reproductive tissues have been observed.

### 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.

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IRRITATION DATA

Skin  
Rabbit  
500 mg  
Remarks: Open irritation test

Eyes  
Rabbit  
500 mg  
24H  
Remarks: Mild irritation effect

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Section 12 - Ecological Information

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No data available.

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Section 13 - Disposal Considerations

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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.

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Section 14 - Transport Information

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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.

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Section 15 - Regulatory Information

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EU DIRECTIVES CLASSIFICATION

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

DEMINIMIS: 1 %

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

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#### Section 16 - Other Information

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#### 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.