Section 1 - Product and Company Information

Product Name 2-BUTANONE PEROXIDE, CA. 35 WT % IN 2,2,4-TRIME-1,3-C5DIOL DIIB (LUPERSOL DDM-9*)
Product Number 495050
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 2-BUTANONE PEROXIDE, CA. 35 WT % IN 2,2,4-TRIME-1,3-PENTANEDIOL DIISOBUTYRATE
CAS # None
SARA 313 None

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

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 immediately.

INHALATION EXPOSURE
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

EYE EXPOSURE
Assure adequate flushing of the eyes by separating the eyelids with fingers.

Section 5 - Fire Fighting Measures

FLASH POINT 180 °F 82 °C Method: closed cup
AUTOIGNITION TEMP
N/A

FLAMMABILITY
N/A

EXTINGUISHING MEDIA
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam. Use water spray to cool fire-exposed containers.

FIREFIGHTING
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Combustible liquid.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area. Shut off all sources of ignition.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP
Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING
User Exposure: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE
Suitable: Keep tightly closed.
Store at 2-8°C

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
Safety shower and eye bath. Use only in a chemical fume hood. Use nonsparking tools.

PERSONAL PROTECTIVE EQUIPMENT
Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Faceshield (8-inch minimum).

GENERAL HYGIENE MEASURES
Wash thoroughly after handling. Wash contaminated clothing before reuse. Discard contaminated shoes.

Section 9 - Physical/Chemical Properties

| Appearance | N/A |
| Property   | Value | At Temperature or Pressure |
Molecular Weight    210.2 AMU
pH                    N/A
BP/BP Range           N/A
MP/MP Range           N/A
Freezing Point        N/A
Vapor Pressure        N/A
Vapor Density         N/A
Saturated Vapor Conc. N/A
SG/Density            1 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
Surface Tension       N/A
Partition Coefficient N/A
Decomposition Temp.   N/A
Flash Point           180 °F 82 °C Method: closed cup
Explosion Limits      N/A
Flammability          N/A
Autoignition Temp     N/A
Refractive Index      1.437
Optical Rotation      N/A
Miscellaneous Data    N/A
Solubility            N/A

N/A = not available

Section 10 - Stability and Reactivity

STABILITY
Stable: Stable.
Conditions of Instability: 55°C
Materials to Avoid: Strong oxidizing agents, Amines, Acids, Bases, Heavy metals, Reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Acetic acid, Methyl ethyl ketone.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: May occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Can cause blindness.
Inhalation: Toxic if inhaled.
Ingestion: Harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.
Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema.
Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.
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. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Organic peroxide type E, liquid
UN#: 3107
Class: 5.2
Packing Group: Packing Group II
Hazard Label: Organic Peroxide
PIH: Not PIH

IATA

Proper Shipping Name: Organic peroxide type E, liquid
IATA UN Number: 3107
Hazard Class: 5.2

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION
Symbol of Danger: O T
Indication of Danger: Oxidizing. Toxic.
R: 9 22 23 35
Risk Statements: Explosive when mixed with combustible material. Harmful if swallowed. Toxic by inhalation. Causes severe burns.
S: 53 26 36/37/39 45
Safety Statements: Avoid exposure – obtain special instructions before use. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US CLASSIFICATION AND LABEL TEXT
Risk Statements: Explosive when mixed with combustible material. Harmful if swallowed. Toxic by inhalation. Causes severe burns.
Safety Statements: Avoid exposure – obtain special instructions before use. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
US Statements: Combustible.

UNITED STATES REGULATORY INFORMATION
SARA LISTED: No

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.
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.