Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 08/13/2004 Reviewed on 06/18/2004

1 Identification of substance:

- Product details:

  Product name: 2-Methoxyethylamine

- Stock number: B22924

- Manufacturer/Supplier:

  Alfa Aesar, A Johnson Matthey Company
  Johnson Matthey Catalog Company, Inc.
  30 Bond Street
  Ward Hill, MA 01835-8099
  Emergency Phone: (978) 521-6300
  CHEMTREC: (800) 424-9300
  Web Site: www.alfa.com

- Information Department: Health, Safety and Environmental Department

- Emergency information:

  During normal hours the Health, Safety and Environmental Department. After normal hours call Chemtrec at (800) 424-9300.

2 Composition/Data on components:

- Chemical characterization:

  Description: (CAS#)

  2-Methoxyethylamine (CAS# 109-85-3): 100%

- Identification number(s):

  EINECS Number: 203-712-1

3 Hazards identification
Nitrogen oxides (NOx)
- Protective equipment:
  Wear self-contained respirator.
  Wear fully protective impervious suit.

- 6 Accidental release measures

- Person-related safety precautions:
  Wear protective equipment. Keep unprotected persons away.
  Ensure adequate ventilation
  Keep away from ignition sources

- Measures for environmental protection:
  Do not allow material to be released to the environment without proper governmental permits.

- Measures for cleaning/collection:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Use neutralizing agent.
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
  Keep away from ignition sources.

- Additional information:
  See Section 7 for information on safe handling
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

- 7 Handling and storage

- Handling

- Information for safe handling:
  Keep container tightly sealed.
  Store in cool, dry place in tightly closed containers.
  Ensure good ventilation at the workplace.

- Information about protection against explosions and fires:
  Keep ignition sources away.
  Protect against electrostatic charges.
  Fumes can combine with air to form an explosive mixture.

- Storage

- Requirements to be met by storerooms and receptacles:
  Store in a cool location.
Full face protection
- **Body protection**: Protective work clothing.

- **9 Physical and chemical properties:**

  - **General Information**

  - **Form**: Liquid

  - **Color**: Colorless

  - **Odor**: Not determined

  - **Change in condition**

    - **Melting point/Melting range**: Not determined

    - **Boiling point/Boiling range**: 87-90 °C

    - **Sublimation temperature / start**: Not determined

    - **Flash point**: 12 °C

    - **Ignition temperature**: Not determined

    - **Decomposition temperature**: Not determined

  - **Danger of explosion**:

    Product is not explosive. However, formation of explosive air/vapor mixtures is possible.

  - **Explosion limits**:

    - **Lower**: Not determined

    - **Upper**: Not determined

  - **Vapor pressure**: Not determined

  - **Density**: at 20 °C 0.874 g/cm³
Behavioral - tremor.
Behavioral - ataxia.
Lungs, Thorax, or Respiration - dyspnea.
Lungs, Thorax, or Respiration - cyanosis.

- **Subacute to chronic toxicity:**

Corrosive materials are acutely destructive to the respiratory tract, eyes, skin and digestive tract. Eye contact may result in permanent damage and complete vision loss. Inhalation may result in respiratory effects such as inflammation, edema, and chemical pneumonitis. May cause coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Ingestion may cause damage to the mouth, throat and esophagus. May cause skin burns or irritation depending on the severity of the exposure.

- **Additional toxicological information:**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

- **12 Ecological information:**

- **General notes:**

Do not allow material to be released to the environment without proper governmental permits.

- **13 Disposal considerations**

- **Product:**

Consult state, local or national regulations to ensure proper disposal.

- **Uncleaned packagings:**

- **Recommendation:**

Disposal must be made according to official regulations.

- **14 Transport information**
Packaging group: II

Proper shipping name: AMINES, FLAMMABLE, CORROSIVE, N.O.S. (Methoxyethylamine)

15 Regulations

Product related hazard informations:

Hazard symbols:
C Corrosive F Highly flammable

Risk phrases:
11 Highly flammable.
34 Causes burns.

Safety phrases:
7 Keep container tightly closed.
20 When using do not eat or drink.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
33 Take precautionary measures against static discharges.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately.
60 This material and its container must be disposed of as hazardous waste.

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Non-Domestic Substances List (NDSL).

Information about limitation of use:

For use only by technically qualified individuals.

16 Other information:

Employers should use this information only as a supplement to
Product Identification

Product ID: 3,4-DIHYDRO-2H-PYRAN, 97% D10620-8
MSDS Date: 01/19/1988
FSC: 6850
NIIN: 00N014288
MSDS Number: BKXYG

Responsible Party

Company Name: ALDRICH CHEMICAL CO
Box: 355
City: MILWAUKEE
State: WI
ZIP: 53201
Country: US
Info Phone Num: 414-273-3850
CAGE: 60928

Contractor Identification

Company Name: ALDRICH CHEMICAL CO INC
Address: 1001 WEST ST PAUL AVE
Box: 355
City: MILWAUKEE
State: WI
ZIP: 53233
Country: US
Phone: 414-273-3850
CAGE: 60928

Composition/Information on Ingredients

Ingredient: 2H-PYRAN, 3,4-DIHYDRO-, 97%
CAS: 110-87-2
RTECS #: UP7700000
Fraction by Wt: 97%

Hazard Identification

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation: YES Skin: YES Ingestion: NO
Reports of Carcinogenicity: NTP: NO IARC: NO OSHA: NO
Health Hazards Acute and Chronic: ACUTE: MAY BE HARMFUL BY INHALATION, INGESTION OR SKIN ABSORPTION. VAPOR OR MIST IS IRRITATING TO EYES, MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.
Explanation of Carcinogenicity: NOT RELEVANT
Effects of Overexposure: SEE HEALTH HAZARDS.
Medical Cond Aggravated by Exposure: NONE SPECIFIED BY MANUFACTURER.

First Aid Measures

First Aid: EYES: IMMEDIATELY FLUSH W/COPIOUS AMTS OF WATER FOR AT LEAST 15 MINUTES. SKIN: IMMEDIATELY FLUSH W/COPIOUS AMTS OF WATER FOR 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. REMOVE AND WASH CO NTAMINATED CLOTHING PROMPTLY. INHAL: REMOVE TO FRESH AIR. SUPPORT BRTHG (GIVE O2/ARTF RESP), CALL MD. INGEST: CALL MD IMMEDIATELY.

Fire Fighting Measures

Flash Point Method: CC
Flash Point: 4°F, -16°C
Extinguishing Media: CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR POLYMER FOAM. WATER MAY BE EFFECTIVE FOR COOLING BUT NOT EXTINGUISHMENT.
Fire Fighting Procedures: WEAR NIOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT TO PREVENT CONTACT WITH SKIN AND EYES.
ALDRICH CHEMICAL COMPANY -- 3-CHLOROPEROXYBENZOIC ACID 27303-1 --
6810-00N014218

====================  Product Identification  =================

Product ID: 3-CHLOROPEROXYBENZOIC ACID 27303-1
MSDS Date: 03/14/1990
FSC: 6810
NIIN: 00N014218
MSDS Number: BKKVG

Company Name: ALDRICH CHEMICAL COMPANY
Box: 355
City: MILWAUKEE
State: WI
ZIP: 53201
Country: US
Info Phone Num: 414-273-3850
CAGE: 60928

Company Name: ALDRICH CHEMICAL CO INC
Address: 1001 WEST ST PAUL AVE
Box: 355
City: MILWAUKEE
State: WI
ZIP: 53233
Country: US
Phone: 414-273-3850
CAGE: 60928

=============== Composition/Information on Ingredients ===============

Ingredient: PEROXYBENZOIC ACID, M-CHLORO- (3-CHLOROPEROXYBENZOIC ACID,
50-60%)
CAS: 937-14-4
RTECS #: SD9480000
Fraction by Wt.: 50-60%

=============== Hazards Identification ==================

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation: YES Skin: YES Ingestion: NO
Reports of Carcinogenicity: NTP: NO IARC: NO OSHA: NO
Health Hazards Acute and Chronic: ACUTE: MAY BE HARMFUL BY INHALATION,
INGESTION, OR SKIN ABSORPTION. CAUSES EYE AND SKIN IRRITATION.
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY
TRACT.
Explanation of Carcinogenicity: NOT RELEVANT
Effects of Overexposure: SEE HEALTH HAZARDS.
Medical Cond Aggravated by Exposure: NONE SPECIFIED BY MANUFACTURER.

=============== First Aid Measures =================

First Aid: EYES: IMMEDIATELY FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT
LEAST 15 MINUTES. SKIN: IMMEDIATELY WASH WITH SOAP AND COPIOUS
AMOUNTS OF WATER. WASH CONTAMINATED CLOTHING BEFORE REUSE. INHAL:
REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION.
IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL MD. INGEST: CALL MD
IMMEDIATELY.

=============== Fire Fighting Measures =================

Extinguishing Media: WATER SPRAY. CO2, DRY CHEMICAL POWDER, ALCOHOL OR
POLYMER FOAM.
Fire Fighting Procedures: WEAR NIOSH/MSHA APPROVED PRESSURE DEMAND SCBA
AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.