SIGMA-ALDRICH

Material Safety Data Sheet

Date Printed: 19/OCT/2004 Date Updated: 13/MAR/2004 Version 1.2 According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

1 - Product and Company Information

Product Name ACETYLENEDICARBOXYLIC ACID, MONOPOTASSIU M SALT, 98+% Product Number A15401 Sigma-Aldrich Pty, Ltd Company Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia

+61 2 9841 0555 Technical Phone # +61 2 9841 0500 Emergency Phone # +61 2 9841 0566

2 - Composition/Information on Ingredients

Product Name CAS # EC no Annex I

Index Number

ACETYLENE DICARBOXYLIC 928-04-1 213-169-2 None

ACIDMONOPOTASSIUM

Formula C4H2O4.K Molecular Weight 152.15 AMU

Monopotassium salt of acetylenedicarboxylic acid Synonyms

* IJ-4783

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT Toxic by inhalation and if swallowed. Very toxic in contact with skin. Irritating to eyes, respiratory system and skin.

4 - First Aid Measures

AFTER INHALATION

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

AFTER EYE CONTACT

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

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXPLOSION DATA

Dust Potential: This material, like most materials in powder form, is capable of creating a dust explosion.

EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam. Water spray.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed. Store in a cool dry

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Special Protective Measures: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

9 - Physical and Chemical Properties

Appearance	Color: White Form: Powder	
Property	Value	At Temperature or Pressure
pH BP/BP Range MP/MP Range Flash Point Flammability Autoignition Temp Oxidizing Properties Explosive Properties Explosion Limits	N/A N/A N/A N/A N/A N/A N/A N/A N/A	

```
Vapor Pressure
                      N/A
SG/Density
                      N/A
Partition Coefficient N/A
Viscosity
                      N/A
Vapor Density
                      N/A
Saturated Vapor Conc. N/A
Evaporation Rate
                     N/A
Bulk Density
                      N/A
Decomposition Temp.
                      N/A
Solvent Content
                      N/A
Water Content
                      N/A
Surface Tension
                     N/A
Conductivity
                      N/A
Miscellaneous Data
                     N/A
Solubility
                      N/A
```

10 - Stability and Reactivity

STABILITY

Materials to Avoid: Bases, Reducing agents, Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

11 - Toxicological Information

RTECS NUMBER: AP0700000

ACUTE TOXICITY

LD50 Oral

Mouse

63 mg/kg

LD50

Intraperitoneal

Mouse

32 MG/KG

LD50

Intravenous

Mouse

89 MG/KG

LD50

Skin

Guinea pig

25 mg/kg

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Inhalation: Material is irritating to mucous membranes and upper respiratory tract.

Multiple Routes: May be fatal if inhaled, swallowed, or absorbed through skin. Causes eye and skin irritation.

12 - Ecological Information

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

```
RID/ADR
   UN#: 2811
   Class: 6.1
   PG: I
   Proper Shipping Name: Toxic solid, organic, n.o.s.
IMDG
   UN#: 2811
   Class: 6.1
   PG: I
   Proper Shipping Name: Toxic solid, organic, n.o.s.
   Marine Pollutant: No
   Severe Marine Pollutant: No
   Technical Name: Required
IATA
   UN#: 2811
   Class: 6.1
   PG: I
   Proper Shipping Name: Toxic solid, organic, n.o.s.
   Inhalation Packing Group I: No
   Technical Name: Required
```

15 - Regulatory Information

```
CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
INDICATION OF DANGER: T+
    Very toxic.
R-PHRASES: 23/25 27 36/37/38
    Toxic by inhalation and if swallowed. Very toxic in contact with skin. Irritating to eyes, respiratory system and skin.
S-PHRASES: 26 36/37/39 45
    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).
```

16 - Other Information

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.

DISCLAIMER

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