

## MATERIAL SAFETY DATA SHEET

## SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

<u>Product Name:</u> Methanethiol (ampule)

Product Code: M06110

<u>Supplier</u>: Pfaltz & Bauer, Inc.

172 E. Aurora Street

Waterbury, CT 06708 USA

<u>Phone</u>: 203 574-0075

<u>Fax</u>: 203 574-3181

Emergency Phone: CHEMTREC, US: 1-800-424-9300

CHEMTREC, International: 1-703-527-3887

### **SECTION 2: COMPOSITION/INFORMATION on INGREDIENTS**

<u>Chemical Name</u>: Methanethiol (ampule)

<u>Synonyms</u>: Mercaptan C1, Methyl mercaptan

<u>CAS Number</u>: 74-93-1

MDL Number: MFCD00004866

FEMA Number: Not Available

C.I. Number: Not Available

Beilstein Reg. Number: 1696840

Molecular Formula: CH₃SH

Molecular Weight: 48.11

### **SECTION 3: HAZARDS IDENTIFICATION**

Acute Health Hazard: Irritant to eyes, skin, mucous membranes and

respiratory system. May be harmful by ingestion,

inhalation or skin absorption.

<u>Chronic Health Hazard</u>: Flammable (USA) Extremely Flammable (EU).

Highly Toxic (USA) Toxic (EU). Dangerous for the environment. Very toxic by inhalation. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Highly toxic if

inhaled. Target organ effect.

HMIS Rating: H:4 F:4 R:0

NFPA Rating: H:4 F:4 R:0

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

## **SECTION 4: FIRST AID MEASURES**

<u>Eye Contact:</u> Flush eyes with large amounts of water for fifteen

minutes. Separate eyelids with fingers. If irritation

persists, seek medical attention. May be fatal.

Skin Contact: Wash skin with soap and water. If irritation persists,

seek medical attention. May be fatal.

<u>Ingestion:</u> Do not induce vomiting. Seek medical attention.

Fatal.

<u>Inhalation:</u> Move to a fresh air environment. Contact a physician

if breathing becomes difficult. Fatal.

#### **SECTION 5: FIRE FIGHTING MEASURES**

Flash Point: -18 °C

Explosion Limits: Lower: 3.9 % by volume

Upper: 21.8 % by volume

Auto Ignition Temperature: Not Available

Extinguishing Media: Carbon dioxide, dry chemical powder or foam, water

spray.

<u>Protective Equipment</u>: Wear self-contained respirator and fully protective

impervious suit.

<u>Specific Hazards</u>: Emits hazardous fumes under fire conditions.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: Wear a self-contained breathing apparatus, rubber

boots and gloves, and disposable coveralls. Dispose of

coveralls after use.

Keep unprotected persons away.

<u>Environmental Protection</u>: Keep spills out of sewers and bodies of water. Dike

and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and

wash spill site after material pickup is complete.

#### **SECTION 7: HANDLING and STORAGE**

<u>Handling</u>: Avoid breathing dust, vapor, mist or gas. Avoid

contact with skin and eyes. Avoid prolonged or

repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep

ignition sources away.

Storage: Store in a tightly closed container in a dry, well-

ventilated place.

Storage Temperature: <52 °C at all times

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

<u>Eyes</u>: Wear appropriate protective eyeglass or chemical

safety goggles. Eyewash facility in vicinity.

Skin: Wear impervious gloves and protective clothing.

Respiratory: Use a NIOSH approved respirator when exposure

limits are exceeded or if irritation or other symptoms

are experienced.

<u>Exposure Limits</u>: <u>Country Source Type Value</u>

USA ACGIH TWA 1 mg/m3
USA OSHA PEL 20 mg/m3

### **SECTION 9: PHYSICAL and CHEMICAL PROPERTIES**

Appearance: Gas, at room temperature clear colorless liquid.

Odor: Not Available

Melting Point: -123 °C

Boiling Point: 6 °C

Density: 1.66 g/l

Refractive Index, n20D: Not Available

<u>Viscosity</u>: Not Available

Solubility in Water: Not Available

#### SECTION 10: STABILITY and REACTIVITY

<u>Stability</u>: Stable under normal temperatures and pressures.

<u>Incompatibility</u>: Avoid contact with moisture, metals, Strong bases,

Strong oxidizing agents, Strong reducing agents, Halogenated solvents, Organic materials, Zinc

Copper, Copper alloys.

#### SECTION 11: TOXICOLOGICAL INFORMATION

RTECS Number: PB4375000

<u>Target Organs</u>: Nerves, Blood, Liver

<u>Toxicity Data</u>: Inhalation Rat LD<sub>50</sub>: 675 ppm

Inhalation Mouse LD<sub>50</sub>: 6.53 mg/kg

#### **SECTION 12: ECOLOGICAL INFORMATION**

Not Available

### **SECTION 13: DISPOSAL CONSIDERATIONS**

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

#### **SECTION 14: TRANSPORT INFORMATION**

<u>DOT Shipping Name:</u> Receptacles, small, containing gas (gas cartridges) [flammable, without release device, not refillable and not exceeding 1 L capacity]

<u>DOT UN Number</u>: UN2037 DOT Hazard Class: 2.1

**DOT Packing Group**: not allowed on aircraft

<u>IATA Shipping Name:</u> Receptacles, small, containing gas (gas cartridges) [flammable, without release device, not refillable and not exceeding 1 L capacity]

IATA UN Number: UN2037 IATA Hazard Class: 2.1

IATA Packing Group: not allowed on aircraft

### SECTION 15: REGULATORY INFORMATION

#### <u>United States:</u>

Toxic Substance Control Act (TSCA): Listed

Superfund Amendments and Reauthorization Act (SARA 302): Not listed Superfund Amendments and Reauthorization Act (SARA 313): Not listed

## **International:**

European Inventory of Existing Chemical Substances (EINECS): Listed (200-822-1)

Canadian Domestic Substances List (DSL): Listed

# **SECTION 16: OTHER INFORMATION**

Date Prepared: 5/19/09 MH

The information above is presented in good faith. It is believed to be accurate and represents the best information currently available to us. However we make no warranty with respect to such information and we assume no liability resulting from its use. The user should consider this information as a supplement to other information that may be available and make independent judgment to ensure proper use to protect the health and safety of employees and the environment. Pfaltz and Bauer shall not be held liable for any damage resulting from handling or from contact with the above product.