

# MATERIAL SAFETY DATA SHEET

### **SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION**

<u>Product Name</u>: Acetonitrile

Product Code: A04640

<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**

Chemical Name: Acetonitrile

<u>Synonyms</u>: CAN; Methylcyanide; Cyanomethane; Ethanenitrile;

Ethyl nitrile

<u>CAS Number</u>: 75-05-8

MDL Number: MFCD00001878

Beilstein Reg. Number: 741857

Molecular Formula: CH₃CN

Molecular Weight: 41.05

#### 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>: Reproductive effects. Teratogen.

HMIS Rating: H:2 F:3 R:0

NFPA Rating: H:2 F:3 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**

Eye Contact: Flush eyes with large amounts of water for fifteen

minutes. Separate eyelids with fingers. If irritation

persists, seek medical attention.

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

seek medical attention.

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

Inhalation: Move to a fresh air environment. Contact a physician

if breathing becomes difficult.

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

Flash Point: 2°C

Explosion Limits: Lower: 4.4 % by volume

Upper: 16 % by volume

Auto Ignition Temperature: 523°C

Extinguishing Media: For small (incipient) fires, use media such as "alcohol"

foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of

water.

Protective Equipment: 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. Handle and store under inert gas.

Lachrymator.

Storage Temperature: 15 - 30°C

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

Eyes: Wear appropriate protective eyeglass or chemical

safety goggles. Eyewash facility in vicinity.

<u>Skin</u>: 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</u> <u>Source</u> <u>Type</u> <u>Value</u>

USA ACGIH TWA 20 ppm USA OSHA PEL 40 ppm

#### SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

<u>Appearance</u>: Clear, colorless liquid

<u>Odor</u>: Pungent lachrymator

Melting Point: -45 to -48°C

Boiling Point: 80-82°C

Density:  $0.78 \text{ g/cm}^3$ 

Refractive Index, n<sup>20</sup><sub>D</sub>: 1.344

<u>Viscosity</u>: Not available

Solubility in Water: Soluble

#### SECTION 10: STABILITY and REACTIVITY

Stability: Stable under normal temperatures and pressures.

<u>Incompatibility</u>: Strong oxidizing agents, strong acids, bases, reducing

agents, alkali metals.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

RTECS Number: AL7700000

<u>Target Organs</u>: Lungs, Blood, Kidney, Liver, Central nervous system

<u>Toxicity Data</u>: Oral Rat LD<sub>50</sub>: 2460 mg/kg

Skin Rabbit LD<sub>50</sub>: 1250 mg/kg

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

Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

### **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**

**DOT Shipping Name:** Acetonitrile

<u>DOT UN Number</u>: 1648 <u>DOT Hazard Class</u>: 3 DOT Packing Group: II

IATA Shipping Name: Acetonitrile

IATA UN Number: 1648
IATA Hazard Class: 3
IATA Packing Group: II

#### **SECTION 15: REGULATORY INFORMATION**

#### **United States:**

Toxic Substance Control Act (TSCA): Listed

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

#### International:

European Inventory of Existing Chemical Substances (EINECS): Listed (200-835-2)

Canadian Domestic Substances List (DSL): Listed

### **SECTION 16: OTHER INFORMATION**

Date Prepared: 2/6/2009 MAB

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.