



# American International Chemical, Inc.

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## MATERIAL SAFETY DATA SHEET

### PHENYL ISOTHIOCYANATE

#### SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc. 135 Newbury Street Framingham, MA 01701	Emergency Number: Chemtrec Information Number:	800-424-9300 703-527-3887 800-238-0001
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Date: August 2007

Synonyms: Benzene-1 Isothiocyanate, thiocarbanil, phenyl mustard oil

CAS #: 103-72-0

DOT Hazard Class: Toxic UN 1693

#### SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Phenyl Isothiocyanate 98% min.

#### SECTION 3 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** Colorless liquid that is toxic by inhalation and by ingestion. Can cause burns to skin, eyes and upper respiratory tract. Combustible.

**POTENTIAL HEALTH EFFECTS:**

**Skin:** Can cause irritation and burns to the skin.

**Eyes:** Can cause irritation and burns.

**Inhalation:** Toxic if inhaled and can cause burns/irritation to the respiratory tract.

**Ingestion:** May be fatal.

**CHRONIC EFFECTS:** Repeated exposure may cause asthma. Prolonged contact can cause lung irritation.

**CARCINOGENICITY:** No data available.

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#### **SECTION 4 - FIRST AID MEASURES**

**Skin:** Immediately wash skin with soap and water for at least 15 minutes. Remove any contaminated clothing. Wash contaminated clothing before reuse.

**Eyes:** Immediately flush with plenty of water for at least 15 minutes, holding eye lids apart.

**Inhalation:** Remove to the fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**Ingestion:** Wash out mouth with water provided the person is conscious. Call a physician.

**On All Of The Above:** Consult a physician if symptoms persist.

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#### **SECTION 5 - FIRE FIGHTING MEASURES**

Flash Point: 190°F (87°C)

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Flammable Limits: Not Known

Extinguishing Media: Use carbon dioxide or dry chemical powder.

Special Fire Fighting Procedures: Use self-contained breathing apparatus and full fire-fighting turnout gear to prevent contact with skin and eyes.

Unusual Fire Explosion Hazard: Combustible. Emits toxic fumes under fire conditions.

Auto Ignition Temperature: Not known

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#### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Isolate hazard area and deny entry to unnecessary or unprotected personnel.

Shut off all sources of ignition. Wear self contained breathing apparatus, rubber boots and heavy rubber gloves. Contain spill with sand or vermiculite and place in closed containers for disposal.

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#### **SECTION 7 - HANDLING AND STORAGE**

**See Section 8** Avoid contact with skin, eyes and clothing. Use only in a chemical fume hood. Avoid breathing vapors. Use normal personal hygiene and housekeeping. Store in cool dry area away from other incompatible materials. Product is moisture sensitive and should be stored in a dry area.

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#### **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Use only under a chemical fume hood.

SKIN AND EYE PROTECTION:

Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin from liquid.

WORK, HYGIENIC PRACTICES:

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As required to protect skin and eyes from liquid, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE LIMITS: None Established

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### **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Point: 221°C

Vapor Pressure (MM Hg): Not Known

Vapor Density (AIR=1): Not Known

Specific Gravity (H2O=1): 1.130

Bulk Density: Not Applicable

Percent Volatile by Volume (%): Not Known

Melting Point: -21°C

Evaporation Rate (Butyl Acetate=1): Not Known

Solubility in Water: Incompatible

pH: Not Applicable

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### **SECTION 10 - STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce carbon monoxide, carbon dioxide, nitrogen oxides and sulfur oxides.

KEEP AWAY FROM: Water, alcohols, strong bases, amines, acid, strong oxidizing agents and heat.

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### **SECTION 11 - TOXICOLOGICAL INFORMATION**

ORL-MUS	LD <sub>50</sub> - 87 mg/kg
IPR-MUS	LD <sub>50</sub> - 100 mg/kg
SCU-MUS	LD <sub>50</sub> - 250 mg/kg

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### **SECTION 12 - ECOLOGICAL INFORMATION**

Not available

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### **SECTION 13 - DISPOSAL CONSIDERATIONS**

This combustible material may be burned in a chemical incinerator equipped with an after burner and scrubber. Observe all federal, state and local environmental regulations.

RCRA WASTE #: Not Listed

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### **SECTION 14 - TRANSPORTATION INFORMATION**

D.O.T. Tear Gas Substances, N.O.S.

TECHNICAL SHIPPING NAME:.....Phenyl Isothiocyanate

U.N./N.A. NUMBER.....UN 1693

D.O.T. HAZARD CLASS AND GROUP NUMBER....6.1, Group # II

D.O.T. LABEL/PLACARD.....Toxic

PRODUCT LABEL.....Toxic

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### **SECTION 15 - REGULATORY INFORMATION**

OSHA STATUS: Listed

TSCA STATUS: Listed

CERCLA REPORTABLE REQUIREMENTS: (RQ) Not Listed

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance: Unlisted

Section 313 Toxic Chemicals: Unlisted

Section 311/312 Hazard Category: Reactive, Immediate (acute) Health Hazard, Delayed (chronic).

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### **SECTION 16 - OTHER INFORMATION**

Reason for Issue: Changed Date

**This information is given without any warranty or representation. It is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. American International Chemical, Inc., shall not be held liable for any damage resulting from handling or contact with the above product. It is offered solely for your consideration, investigation and verification**

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