### MATERIAL SAFETY DATA SHEET

Last Revision Date: 11/21/2011

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

Catalog Number: NG-16890 Description: Maleimide

Other Names: Maleic acid imide

Supplied by CHEM SERVICE, Inc. PO BOX 599, WEST CHESTER, PA 19381 (610)-692-3026

EMERGENCY PHONE: 1-610-692-3026

# **SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

CAS: 541-59-3

Description: Maleimide EINECS No: 208-787-4 Hazard Symbols: T Molecular Weight: 97.07 Molecular Formula: C4H3NO2

# **SECTION 3 - HAZARDS IDENTIFICATION**

Contact lenses should not be worn in the laboratory

May be harmful if absorbed through the skin.

May be harmful if inhaled.

May be harmful if swallowed.

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin.

Inhalation may be FATAL as a result of spasm, inflammation and edema of the larynx and bron-chi, chemical pneumonitis and pulmonary edema.

Symptoms of exposure may include; burning sensation, coughing, wheezing, laryng-itis, shortness of breath, headache, nausea and/or vomiting.

Lachrymator-Causes severe eye irritation.

Vapors and/or direct eye contact can cause severe eye burns.

Can cause eye irritation.

Can cause skin irritation.

Dust and/or vapors can cause irritation to respiratory tract.

Can be irritating to mucous membranes.

Can cause eye irritation.

Can cause skin burns.

Can cause severe skin burns.

Can cause a severe headache.

Can cause edema-swelling of tissues.

Extremely destructive of mucous membranes and/or upper respiratory tract.

Prolonged exposure can cause severe skin irritation.

Ingestion may cause severe corrosion of the mouth.

Ingestion may cause severe corrosion of the gastro-intestinal tract.

Can cause delayed lung injury.

Can cause delayed adverse health effects.

Repeated exposure to vapors and/or dust can cause eye injury.

Prolonged exposure may cause nausea/headache/dizziness and/or eye damage.

Can cause gastro-intestinal disturbances.

Can cause an allergic skin reaction.

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May be rapidly absorbed through the skin with potential adverse health effects.

Possible teratogen-causes embryo-fetal damage.

Can cause an allergic skin reaction.

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

An antidote is a substance intended to counteract the effect of a poison. It should be administered only by a physician or trained emergency personnel. Medical advice can be obtained from a POISON CONTROL CENTER.

In case of contact: Flush eyes continuously with water for 15-20 minutes. Flush skin with water for 15-20 minutes.

If no burns have occurred-use soap and water to cleanse skin.

If inhaled remove patient to fresh air. Administer oxygen if patient is having difficulty breathing.

If patient has stopped breathing administer artificial respirations.

If patient is in cardiac arrest administer CPR.

Continue life supporting measures until medical assistance has arrived.

Remove and wash contaminated clothing.

If patient is exhibiting signs of shock - Keep warm and quiet.

Contact Poison Control Center immediately if necessary.

Do not administer liquids or induce vomiting to an unconscious or convulsing person.

If patient is vomiting-watch closely to make sure airway does not become obstructed by vomit.

If swallowed, rinse out mouth with water, providing the person is conscious.

Get medical attention if necessary.

### **SECTION 5 - FIRE AND EXPLOSION DATA**

Flash Point: Extinguishing Media:

Not Available Carbon dioxide, dry chemical powder or spray.

Upper Explosion Limit: Lower Explosion Limit: Auto Ignition:

N/A N/A

NFPA Hazard Rating:

Health Flammability Reactivity Special

0 - Least, 1 - Slight, 2 - Moderate, 3 - High, 4 - Severe

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

Spills or leaks: Evacuate area. Wear appropriate OSHA regulated equipment. Ventilate area.

Absorb on vermiculite or similar material.

Sweep up and place in an appropriate container.

Hold for disposal.

Wash contaminated surfaces to remove any residues.

Remove contaminated clothing and wash before reuse.

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

### Handling:

This chemical should be handled only in a hood. Eye shields should be worn.

Use appropriate OSHA/MSHA approved safety equipment.

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Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation Wash thoroughly after handling.

# Storage:

Store in a cool dry place.

Store only with compatible chemicals. Keep tightly closed.

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

OSHA PEL (TWA): ACGIH TLV (TWA): ACGIH TLV (STEL):

N/A N/A N/A

Personal Protective Equipment Eves: Wear Safety Glasses.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements

must be followed whenever workplace conditions warrant a respirator's use.

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

Color: Light Beige

Phase: Crystalline solid
Melting Point: 93-95 C
Boiling Point: sublimes C
Specific Gravity: N/A
Vapor Density: 3.3
Vapor Pressure:N/A

Solubility in water: Soluble
Odor: Ammonia like
Evaporation Rate: N/A
Molecular Weight: 97.07
Molecular Formula: C4H3NO2

# **SECTION 10 - STABILITY AND REACTIVITY**

Hazardous combustion or decomposition products include: carbon monoxide, carbon dioxide, and nitrogen oxides.

Corrosive.

Readily absorbed and retained on clothing and/or shoes.

Incompatible with strong oxidizing agents.

Incompatible with strong acids.

Incompatible with strong bases.

Incompatible with strong reducing agents.

Decomposition liberates toxic fumes.

# **SECTION 11 - TOXICOLOGY INFORMATION**

RTECS: ON4800000

Oral Rat or Mouse LD50: Dermal Rat or Mouse LD50: Rat or Mouse LC50:

80 > N/A N/A

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### **MATERIAL SAFETY DATA SHEET**

Carcinogenicity

 OSHA:
 NTP:
 IARC:
 CARC:
 NIOSH:
 ACGIH:

 No
 No
 No
 No
 No

California Proposition 65 info: Not Listed

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

Ecotoxicity: Not Available

Environmental Fate: Not Available

# **SECTION 13 - DISPOSAL CONSIDERATIONS**

Dispose in accordance with Federal, State and Local regulations.

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

UN Number:Class:Packing Group:Proper Shipping Name:UN28116.1IIIToxic Solid, Organic, nos\*

## **SECTION 15 - REGULATORY INFORMATION**

European Labeling in Accordance with EC Directives Hazard Symbols: T

### Risk Phrases:

- -R25: Toxic if swallowed.
- -R34: Causes burns.
- -R36/37/38: Irritating to eyes, respiratory system and skin.
- -R43: May cause sensitisation by skin contact.

# Safety Phrases:

- -S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- -S36: Wear suitable protective clothing.
- -S37/39: Wear suitable gloves and eye/face protection.
- -S45: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
- -S28a: After contact with skin, wash immediately with plenty of water.

# **SECTION 16 - OTHER INFORMATION**

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded MSDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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### MATERIAL SAFETY DATA SHEET

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