



# American International Chemical, Inc.

Corporate Offices: (800) 238-0001

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## MATERIAL SAFETY DATA SHEET

### FUMARIC ACID

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

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

Revision Date: August 2007

Synonyms: 2, Butenedioic acid, 1,2, ethylenedicarboxylic acid, allomaleic acid, boletic acid.

CAS #: 110-17-8

DOT Hazard Class: Not Regulated

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

Fumaric Acid 99% min.

#### SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: White crystalline odorless powder.  
May irritate skin, eyes and mucous membranes. Acute, nuisance dust, limit to 5 mg/m<sup>3</sup>.

POTENTIAL HEALTH EFFECTS:

Eyes: May cause lachrymation and irritation.

Skin: May cause redness or irritation.

Inhalation: May cause irritation to respiratory system.

CARCINOGENICITY: Not Listed under OSHA, IARC or NTP

#### SECTION 4 - FIRST AID MEASURES

Eyes: Flush with water for at least 15 minutes.

Inhalation: Remove to fresh air.

Skin: Flush with water.

Ingestion: If swallowed, wash out mouth with plenty of water. Seek medical attention.

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

Flash Point: 282°C (540°F)

Flammable Limits: Not Applicable

Extinguishing Media:

Use media that is appropriate to treat surrounding fire - water, dry chemical or carbon dioxide.

Special Fire Fighting Procedures:

Use fire fighting procedure that is appropriate to treat surrounding fire.

Unusual Fire Explosion Hazard:

Avoid accumulation of dust. When mixed with air, may be explosive.

Auto Ignition Temperature: 399C (750°F)

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

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Contain spill, sweep up, collect and place in a disposal container.

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

Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use normal personal hygiene and housekeeping. Store in cool dry area away from other incompatible materials.

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

RESPIRATORY PROTECTION: If dusty use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate dust from the work area.

SKIN AND EYE PROTECTION:

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

WORK, HYGIENIC PRACTICES:

As required to protect skin and eyes from dust. 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 GUIDELINES: None Established

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

Fumaric Acid

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Boiling Point: Not Applicable

Vapor Pressure (MM Hg): Not Applicable

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H2O=1): 1.635

Percent Volatile by Volume (%): Not Applicable

Melting Point: 287°C

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Slight

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

CHEMICAL STABILITY: Stable under normal temperature of pressure.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.  
Keep away from: oxidizers, strong bases, amines, carbonates and alkali metals.

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

Not available

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

Not available

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

EMPTY CONTAINERS: Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: Not Listed

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

DOT HAZARD CLASS: Not Regulated

Fumaric Acid

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**SECTION 15 - REGULATORY INFORMATION**

CERCLA REPORTABLE REQUIREMENTS: (RQ) None

SARA TITLE III INFORMATION:

Section 302 Extremely hazardous Substance: Unlisted

Section 313 Toxic Chemicals: Unlisted

Section 311/312 Hazard Category: Unlisted

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**SECTION 16 - OTHER INFORMATION**

Not Available

Reason for issue: Changed Date

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