



## MATERIAL SAFETY DATA SHEET

CROSSLINKER

MSDS Ref. No: f-00317001

Date Prepared: 03/10/2003

Date Revised: 03/20/2003

### 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME/USE: CROSSLINKER

MSDS CODE: 3044210

#### MANUFACTURER

Magee  
67 Forest Street  
Marlborough, MA 01752

Telephone Number: 1-800-786-2433  
Emergency Telephone (24 hours): 1-800-228-5635  
CHEMTREC (U.S./Can.): 800-424-9300  
CHEMTREC (Int'l): +1 703-527-3887

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS#	% BY WEIGHT
Polyfunctional Aziridine	64265-57-2	75 - 100

See Section 8 for Exposure Limits NA - Not Applicable

OSHA REGULATORY STATUS: This product is classified as hazardous under OSHA regulations.

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Pale Yellow Liquid . Mild, Amine Odor. Corrosive to eyes. Causes eye burns. May cause allergic respiratory and skin reactions. Harmful or fatal if swallowed.

#### POTENTIAL HEALTH EFFECTS (See Section 11 for Toxicological Information)

PRIMARY ROUTE(S) OF EXPOSURE:  Eye       Skin Contact       Skin Absorption  
 Inhalation       Ingestion

#### EFFECTS OF ACUTE EXPOSURE

**EYES:** Causes eye burns. Symptoms may include pain, tearing, redness, and eye injury.

**SKIN:** Causes mild skin irritation. Symptoms may include redness. May cause allergic skin reaction. Symptoms may include redness, itching, swelling, blistering, rash or hives.

**INHALATION:** High concentrations of vapor or mist may cause nose, throat and respiratory tract irritation. Symptoms may include coughing, wheezing and shortness of breath. May cause allergic respiratory reaction. Symptoms may include wheezing, tightness, cough or shortness of breath.

**INGESTION:** Harmful if swallowed. May cause mouth, throat and stomach burns. Symptoms may include nausea, vomiting, diarrhea, and severe stomach pain.

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**EFFECTS OF CHRONIC EXPOSURE:** Prolonged or repeated exposure to an ingredient in this product may cause allergic skin reaction. Inhalation may cause allergic respiratory reaction.

**MEDICAL CONDITIONS AGGRAVATED:** May aggravate pre-existing eye, skin and respiratory conditions. Persons suffering from asthma may react to vapors.

## 4. FIRST AID MEASURES

**EYES:** Flush eyes with plenty of water while holding eyelids apart. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Do not put any medication in the victim's eyes unless instructed by a physician. Get immediate medical attention.

**SKIN:** Immediately flush with plenty of water for at least 15 minutes, then wash with soap and water. Immediately remove contaminated clothing. Get medical attention if irritation develops or persists. Thoroughly wash (or discard) clothing before reuse. Destroy contaminated shoes.

**INHALATION:** Remove to fresh air. If not breathing, give respiration; if breathing is difficult, give oxygen (by trained personnel only). Get immediate medical attention.

**INGESTION:** Do not induce vomiting. Immediately drink one cupful of water or milk. Get immediate medical attention. Never give anything by mouth to an unconscious person.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT AND METHOD:** > 93°C (200°F) Penskey-Marten CC

**EXTINGUISHING MEDIA:** Use water fog, dry chemical, CO<sub>2</sub>, or foam.

**HAZARDOUS COMBUSTION PRODUCTS:** Normal products of combustion (carbon monoxide and carbon dioxide) and nitrogen oxides.

**FIRE AND EXPLOSION HAZARDS:** Heat or impurities may increase temperature, build pressure or rupture closed containers, spreading fire, increasing risk of burns or injuries.

**FIRE FIGHTING INSTRUCTIONS:** Evacuate area. Cool containers exposed to fire with water. MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear should be worn.

**AUTOIGNITION TEMPERATURE:** Not Applicable.

## 6. ACCIDENTAL RELEASE MEASURES

See Section 8, Exposure Controls/Personal Protection and Section 3, Hazard Identification. Floors may be slippery. Use care to avoid falling. Ventilate spill area. Contain and isolate spill. Keep non-essential personnel from entering spill area. Use mop and absorbent to collect material for proper disposal. Rinse area with water.

## 7. HANDLING AND STORAGE

**HANDLING:** Follow label use directions. Do not mix with other chemicals unless instructed by label directions. Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Avoid breathing vapor or mist. Wash thoroughly after handling. Immediately remove contaminated clothing. Wash clothing and equipment before reuse. Destroy contaminated shoes. Open container in well-ventilated areas to avoid exposure to residual propyleneimine that may have collected in the headspace.

**STORAGE:** Keep container closed when not in use. Keep from freezing. Store away from incompatible materials. (See Section 10, Stability and Reactivity).

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**EYE:** Where eye contact is possible, wear safety glasses with side shields or chemical splash goggles (ANSI Z87.1 approved).

**SKIN:** Where skin contact is possible, nitrile, neoprene or butyl rubber gloves should be worn. Do not use latex or PVC gloves. When additional skin contact is possible, other protective equipment and clothing (e.g., footwear) may be needed. All contaminated clothing should

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be removed immediately and cleaned (or discarded) before reuse.

**RESPIRATORY:** No respiratory protection is required if ventilation is adequate to prevent overexposure. When overexposure may occur or if at risk of exposure to aerosol or mist, utilize a respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements.

**ENGINEERING CONTROLS:** Good general room ventilation is expected to be adequate. Do not create spray mists or aerosols.

## EXPOSURE LIMITS:

### INGREDIENT(S)

Polyfunctional Aziridine

### OSHA PEL/STEL

NA

### ACGIH TLV/STEL

NA

NA - Not Available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Mild, Amine

**APPEARANCE:** Pale Yellow

**PERCENT VOLATILE BY WEIGHT:** 1

**VAPOR PRESSURE:** Not Available

**VAPOR DENSITY:** Not Available

**BOILING POINT:** Not Available

**FREEZING/MELTING POINT:** Not Available

**SOLUBILITY IN WATER:** Dispersible

**EVAPORATION RATE:** Not Available

**SPECIFIC GRAVITY:** 1.07

**VISCOSITY:** Not Applicable

**OCTANOL/WATER PARTITION COEFFICIENT:** Not Available

**ODOR THRESHOLD:** Not Available

## 10. STABILITY AND REACTIVITY

**STABILITY (CONDITIONS TO AVOID):** Normally stable. Unstable at elevated temperatures and pressures, or may react with water or acids with some release of energy, but not violently. Avoid contamination with acidic materials, heat, direct sunlight, ultraviolet radiation, strong oxidizing conditions and freezing conditions.

**POLYMERIZATION:** May occur if mixed with acidic materials.

**HAZARDOUS DECOMPOSITION:** None known.

**INCOMPATIBLE MATERIALS:** Acidic materials, anhydrides and strong oxidizers.

## 11. TOXICOLOGICAL INFORMATION

**ACUTE DATA:** This product causes severe eye irritation and mild skin irritation. The following data are available for product ingredients.

### PRODUCT/INGREDIENT

Polyfunctional Aziridine

### ORAL LD<sub>50</sub> (rat)

3038 - mg/kg

### DERMAL LD<sub>50</sub> (rabbit)

Not Available

### INHALATION LC<sub>50</sub> (rat)

Not Available

**SENSITIZATION DATA:** Polyfunctional aziridine may cause an allergic skin reaction. Persons with sensitive airways (e.g., asthmatics) may react to vapors.

### **CHRONIC DATA:**

None known.

**CARCINOGENIC/MUTAGENIC DATA:** Not listed as carcinogenic by NTP, IARC, or ACGIH or regulated as a carcinogen by OSHA. Positive mutagenicity activity has been reported on the aziridine compounds.

## 12. ECOLOGICAL INFORMATION

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No data available.

## 13. DISPOSAL CONSIDERATIONS

Disposal of this material should be in accordance with local, state or provincial and federal regulations. The unused product, as manufactured, is a RCRA non-hazardous waste in accordance with 40 CFR 261. The product has not been evaluated by the Toxicity Characteristic Leachate Procedure (TCLP). According to RCRA, it is the responsibility of the waste generator to ensure proper disposal.

## 14. TRANSPORT INFORMATION

DOT/TDG HAZARDOUS MATERIAL DESCRIPTION: Not regulated

## 15. REGULATORY INFORMATION

*Not meant to be all-inclusive---selected regulations represented.*

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** Under 40 CFR 370.2, this product meets the following hazard categories: Immediate, Delayed.

**313 REPORTABLE INGREDIENTS:** Ingredients in this product are not currently subject to notification.

#### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

**CERCLA REGULATORY:** None of the ingredients in this product are reportable under CERCLA.

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

**TSCA STATUS:** This product complies with all TSCA inventory requirements.

#### MASSACHUSETTS, NEW JERSEY, PENNSYLVANIA RIGHT-TO-KNOW:

##### INGREDIENT(S)

Polyfunctional Aziridine

NA - Not Applicable

##### CAS NO.    STATE LISTING

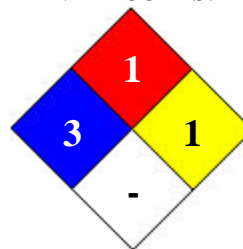
64265-57-2    Not Listed

## 16. OTHER INFORMATION

### HMIS RATING

HEALTH	*	3
FLAMMABILITY		1
REACTIVITY		1
PERSONAL PROTECTION		-

### NFPA CODES:



**APPROVED BY:** Product Safety & Regulatory

### MSDS STATUS

**Revision No:** New MSDS

New MSDS

**APPROVAL DATE:** 03/20/2003

*The information on this data sheet represents our current data and best opinion as to the proper use in handling of the product under normal foreseeable conditions. Any use of this product which is not in conformance with this data sheet or product label, or which involves using the product in combination with any other product or any other process is the responsibility of the user.*