

**SIGMA-ALDRICH**

**Material Safety Data Sheet**

Version 3.2  
Revision Date 11/19/2007  
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**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : **N-Ethylmaleimide**  
Product Number : E3876  
Brand : Sigma-Aldrich  
Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA  
Telephone : +1 800-325-5832  
Fax : +1 800-325-5052  
Emergency Phone # : (314) 776-6555

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : NEM  
Formula : C<sub>6</sub>H<sub>7</sub>NO<sub>2</sub>  
Molecular Weight : 125.13 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>N-Ethylmaleimide</b> 128-53-0	204-892-4	-	-

**3. HAZARDS IDENTIFICATION**

**Emergency Overview**  
**OSHA Hazards**  
Highly toxic by ingestion  
Toxic by skin absorption  
Skin sensitizer  
Corrosive

**HMIS Classification**  
**Health Hazard:** 3  
**Flammability:** 2  
**Physical hazards:** 1

**NFPA Rating**  
**Health Hazard:** 3  
**Fire:** 2  
**Reactivity Hazard:** 1

**Potential Health Effects**

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**Inhalation**

May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**Skin**

Toxic if absorbed through skin. Causes skin burns. May be fatal if absorbed through skin.

**Eyes**

Causes eye burns.

**Ingestion**

May be fatal if swallowed. Causes burns.

**4. FIRST AID MEASURES**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

**In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**5. FIRE-FIGHTING MEASURES**

**Flammable properties**

Flash point 73 °C (163 °F) - closed cup

Ignition temperature no data available

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods for cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

**Handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Storage**

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

Light sensitive.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves.

#### Eye protection

Safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	crystalline
Colour	colourless

### Safety data

pH	no data available
Melting point	44 °C (111 °F)
Boiling point	210 °C (410 °F) at 1,013 hPa (760 mmHg)
Flash point	73 °C (163 °F) - closed cup
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Water solubility	no data available

## 10. STABILITY AND REACTIVITY

### Storage stability

Stable under recommended storage conditions. May discolor on exposure to light.

### Materials to avoid

Strong oxidizing agents, Strong acids, Strong bases

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 25 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Convulsions or effect on seizure threshold.

LD50 Dermal - guinea pig - 500 mg/kg

### Irritation and corrosion

no data available

### Sensitisation

May cause sensitization by skin contact.

### Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Potential Health Effects

Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin	Toxic if absorbed through skin. Causes skin burns. May be fatal if absorbed through skin.
Eyes	Causes eye burns.
Ingestion	May be fatal if swallowed. Causes burns.

## 12. ECOLOGICAL INFORMATION

### Elimination Information (persistence and degradability)

no data available

### Ecotoxicity effects

no data available

### Further information on ecology

no data available

## 13. DISPOSAL CONSIDERATIONS

### Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### DOT (US)

UN-Number: 2928 Class: 6.1 (8) Packing group: II  
Proper shipping name: Toxic solids, corrosive, organic, n.o.s. (N-Ethylmaleimide)

**IMDG**  
UN-Number: 2928 Class: 6.1 (8) Packing group: II EMS-No: F-A, S-B  
Proper shipping name: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S. (N-Ethylmaleimide)  
Marine pollutant: No

**IATA**  
UN-Number: 2928 Class: 6.1 (8) Packing group: II  
Proper shipping name: Toxic solid, corrosive, organic n.o.s. (N-Ethylmaleimide)

#### 15. REGULATORY INFORMATION

##### OSHA Hazards

Highly toxic by Ingestion, Toxic by skin absorpton, Skin sensitizer, Corrosive

##### TSCA Status

On TSCA Inventory

##### DSL Status

All components of this product are on the Canadian DSL list.

##### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

##### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

##### SARA 311/312 Hazards

Acute Health Hazard

##### Massachusetts Right To Know Components

No Components Listed

##### Pennsylvania Right To Know Components

N-Ethylmaleimide

CAS-No.  
128-53-0

Revision Date

##### New Jersey Right To Know Components

N-Ethylmaleimide

CAS-No.  
128-53-0

Revision Date

##### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

#### 16. OTHER INFORMATION

##### Further Information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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