

# MATERIAL SAFETY DATA SHEET

## Hampford Research, Inc.

### SECTION 1. -----CHEMICAL PRODUCT AND COMPANY IDENTIFICATION-----

#### MONO HEMA MALEATE

**CHEMICAL FORMULA:** C6 H8 O5 **CAS NUMBER:** 26560-94-1

**CHEMICAL NAME:** Mono(2-hydroxyethyl) maleate

**REVISED:** 9/7/2004

**MANUFACTURER:** Hampford Research, Inc  
P.O. Box 1073  
54 Veterans Blvd.  
Stratford, CT 06615

**EMERGENCY TELEPHONE NUMBERS:** OFFICE (203) 375-1137  
CHEMTREC (800) 424-9300

### SECTION 2. -----COMPOSITION / INFORMATION ON INGREDIENTS-----

COMPONENT	CAS #	% BY WEIGHT	EXPOSURE LIMITS
Mono Hema Maleate	26560-94-1	92	none established

### SECTION 3. -----HAZARDS IDENTIFICATION-----

**EYES:** May cause redness and irritation.

**SKIN:** May cause irritation.

**SWALLOWING:** May cause irritation of membranes.

**INHALATION:** May cause respiratory difficulty.

### SECTION 4. -----FIRST AID MEASURES-----

**EYE CONTACT:**

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

**SKIN CONTACT:**

In case of contact, immediately wash skin with soap and copious amounts of water for at least 15 minutes. Wash contaminated clothing before reuse.

**INGESTION:**

If swallowed, wash out mouth with water provided person is conscious. Do not induce vomiting. Get prompt medical attention.

**INHALATION:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get prompt medical attention.

### SECTION 5. -----FIRE FIGHTING MEASURES-----

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

None expected.

**FIRE EXTINGUISHING MEDIA:**

Water spray, carbon dioxide, dry chemical powder or appropriate foam.

# Material Safety Data Sheet

## SPECIAL FIREFIGHTING INSTRUCTIONS:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## SECTION 6. -----ACCIDENTAL RELEASE MEASURES-----

### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.

### SPILL CLEANUP MEASURES:

Pick up excess, absorb remainder with a suitable material. Ventilate area and wash spill site after material pickup is complete.

## SECTION 7. -----HANDLING AND STORAGE-----

### HANDLING AND STORAGE REQUIREMENTS:

Store in a cool, dry place. Keep container tightly closed. Avoid storing with oxidizers.

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

**EYE/FACE PROTECTION:** Wear safety goggles. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact from airborne material. Eye bath available.

**SKIN PROTECTION:** Wear appropriate impervious clothing such as chemical-resistant coveralls and gloves. Safety shower available.

**RESPIRATORY PROTECTION:** NIOSH/MSHA approved air purifying respirator.

**ENGINEERING CONTROLS:** Local exhaust recommended.

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

**PHYSICAL STATE:** Liquid

**MELTING POINT:** N/A

**BOILING POINT:** >200°C

**SPECIFIC GRAVITY:** 1.1

**APPEARANCE:** Clear

**ODOR:** Slight acrylate odor

**OTHER:** Does not sustain combustion at 100 degrees C

## SECTION 10. -----STABILITY AND REACTIVITY-----

### INCOMPATIBILITIES:

Avoid acids, alkalis, strong oxidizing agents and reducing agents. Avoid sunlight and temperatures greater than 100°F.

### HAZARDOUS DECOMPOSITION:

Toxic fumes of carbon monoxide and carbon dioxide.

### CHEMICAL STABILITY:

Stable.

### HAZARDOUS POLYMERIZATION:

Polymerization may occur. Avoid sunlight, initiators and oxidizing agents.

# Material Safety Data Sheet

## SECTION 11. -----TOXICOLOGICAL INFORMATION-----

### TOXICOLOGICAL EFFECTS:

To the best of our knowledge, the chemical, physical and toxicological properties have not yet been investigated.

## SECTION 12. -----ECOLOGICAL INFORMATION-----

### ECOLOGICAL EFFECTS:

Data not yet available.

## SECTION 13. -----DISPOSAL INFORMATION-----

### WASTE MANAGEMENT PROCEDURES:

Observe all Federal, State and Local environmental regulations.

## SECTION 14. -----TRANSPORT INFORMATION-----

### TRANSPORTATION INFORMATION:

Not regulated no classification assigned

### -----DOT (DOMESTIC SURFACE)-----

PROPER SHIPPING NAME: Not regulated by DOT no classification assigned

HAZARD CLASS OR DIVISION:

UN / NA NUMBER:

PACKING GROUP:

DOT PRODUCT RQ lbs (kgs):

HAZARD LABEL (s):

HAZARD PLACARD (s):

### -----IMO / IMDG CODE (OCEAN)-----

PROPER SHIPPING NAME: Not regulated by IMDG no classification assigned

HAZARD CLASS DIVISION NUMBER:

UN NUMBER:

PACKAGING GROUP:

HAZARD LABEL (s):

HAZARD PACKARD (s):

### -----ICAO / IATA (AIR)-----

PROPER SHIPPING NAME: Not regulated by IATA no classification assigned

HAZARD CLASS DIVISION NUMBER:

UN NUMBER:

SUBSIDIARY RISK:

PACKING GROUP:

HAZARD LABEL (s):

RADIOACTIVE?:

PASSENGER AIR - MAX QTY:

PASSENGER PACKING INSTRUCTION:

CARGO AIR - MAX QTY:

CARGO AIR PACKAGING INSTRUCTION:

## SECTION 15. -----REGULATORY INFORMATION-----

Revision Date: 9/7/2004

Page 3 of 4

Chemical Name: Mono(2-hydroxyethyl) maleate

# Material Safety Data Sheet

---

## REGULATORY INFORMATION:

Inventory Status:  
On TSCA Inventory Tape.  
On NDSL  
Canada Gazette, Part I, January 31, 1998.  
On EINECS  
Annex to Official Journal of the European Communities, 15 June 1990.  
On ECL  
Korean Existing Chemicals List, January 1997.  
On SWISS  
Giftliste 1 (List of Toxic Substances 1), 31 May 1999.  
Toxic Category 4.  
Regulatory List Number:  
EINECS No.: 247-803-4  
ECL Serial No.: KE-03994  
SWISS No.: G-2379  
Confidentiality Status:  
Public

## SECTION 16. -----ADDITIONAL INFORMATION-----

### ADDITIONAL INFORMATION:

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Hampford Research, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. Hampford Research grants permission to make unlimited paper copies for internal use only.