



## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** HX-752 DYNAMAR(TM) Brand Curative  
**MANUFACTURER:** 3M  
**DIVISION:** SMD - Energy Markets - Filtration

**ADDRESS:** 3M Center  
 St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 06/09/2008  
**Supersedes Date:** 05/07/2007

**Document Group:** 06-3149-9

**Product Use:**

Intended Use: Binder  
 Specific Use: Binder

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
Isophthaloylbis(2-Methylaziridine)	7652-64-4	> 97
Toluene	108-88-3	< 2
Xylene	1330-20-7	< 0.5

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** Clear to pale amber liquid.

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** Hazardous polymerization may occur. May cause chemical eye burns. May cause chemical skin burns. May cause chemical gastrointestinal burns. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

#### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

**Skin Contact:**

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

**Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May be absorbed following inhalation and cause target organ effects.

**Ingestion:**

Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May be harmful if swallowed.

May be absorbed following ingestion and cause target organ effects.

**Target Organ Effects:**

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

### **3.3 POTENTIAL ENVIRONMENTAL EFFECTS**

Do not mix scrap containing this product with wastes containing amines, acids, acid chlorides, and halogenated materials. SPILLS - Dilute with appropriate solvent.

## **SECTION 4: FIRST AID MEASURES**

### **4.1 FIRST AID PROCEDURES**

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing and clean shoes before reuse. IMMEDIATELY wash affected area with soap and water.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

## **SECTION 5: FIRE FIGHTING MEASURES**

### **5.1 FLAMMABLE PROPERTIES**

<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	<i>&gt;=200 °F [Test Method: Closed Cup]</i>
<b>Flammable Limits - LEL</b>	<i>No Data Available</i>
<b>Flammable Limits - UEL</b>	<i>No Data Available</i>

### **5.2 EXTINGUISHING MEDIA**

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

### **5.3 PROTECTION OF FIRE FIGHTERS**

**Special Fire Fighting Procedures:** Water may be used to blanket the fire. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Non-flammable: ordinary combustible material. Exothermic polymerization, ignition with large amounts of smoke possible.

**Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.**

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Accidental Release Measures:** Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Ventilate the area with fresh air. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Avoid contact with incompatible materials listed in the Reactivity Data Section. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with detergent and water. Clean up residue with an appropriate organic solvent. Read and follow safety precautions on the solvent label and MSDS. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

**SECTION 7: HANDLING AND STORAGE**

**7.1 HANDLING**

For industrial or professional use only. Avoid breathing of vapors, mists or spray. Avoid skin contact. Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Decontaminate work surfaces frequently to avoid exposure by contact. Avoid skin contact with hot material. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

**7.2 STORAGE**

Store away from areas where product may come into contact with food or pharmaceuticals. Keep container in well-ventilated area. Store away from heat. Store out of direct sunlight. Store away from acids. Store at 0 degrees F or below.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 ENGINEERING CONTROLS**

Use in an enclosed process area is recommended. Do not use in a confined area or areas with little or no air movement. Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers. Provide appropriate local exhaust when product is heated.

**8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**8.2.1 Eye/Face Protection**

Avoid eye contact.

The following eye protection(s) are recommended: Full Face Shield, Indirect Vented Goggles.

**8.2.2 Skin Protection**

Avoid skin contact. Wear insulated gloves to protect against frostbite.

During heating:

Avoid skin contact with hot material.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Neoprene, Polyethylene/Ethylene Vinyl Alcohol. The following protective clothing material(s) are recommended: Apron - Neoprene.

**8.2.3 Respiratory Protection**

Avoid breathing of vapors, mists or spray.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Fullface supplied-air respirator, Half facepiece or fullface air-purifying respirator with organic vapor cartridges and N95 particulate prefilters. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

**8.2.4 Prevention of Swallowing**

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

**8.3 EXPOSURE GUIDELINES**

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
Toluene	ACGIH	TWA	20 ppm	Table A4
Toluene	CMRG	STEL	75 ppm	Skin Notation*
Toluene	OSHA	TWA, Vacated	100 ppm	

Toluene	OSHA	STEL, Vacated	150 ppm	
Toluene	OSHA	TWA	200 ppm	Table Z-2
Toluene	OSHA	CEIL	300 ppm	Table Z-2
Xylene	ACGIH	TWA	100 ppm	Table A4
Xylene	ACGIH	STEL	150 ppm	Table A4
Xylene	OSHA	TWA	100 ppm	Table Z-1A
Xylene	OSHA	STEL	150 ppm	Table Z-1A

\* Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

VAC Vacated PEL: Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

**SOURCE OF EXPOSURE LIMIT DATA:**

- ACGIH: American Conference of Governmental Industrial Hygienists
- CMRG: Chemical Manufacturer Recommended Guideline
- OSHA: Occupational Safety and Health Administration
- AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Odor, Color, Grade:</b>	Clear to pale amber liquid.
<b>General Physical Form:</b>	Liquid
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	>=200 °F [ <i>Test Method:</i> Closed Cup]
<b>Flammable Limits - LEL</b>	<i>No Data Available</i>
<b>Flammable Limits - UEL</b>	<i>No Data Available</i>
<b>Boiling point</b>	<i>No Data Available</i>
<b>Density</b>	1.1 g/ml
<b>Vapor Density</b>	Approximately 3.3 [@ 20 °C] [ <i>Ref Std:</i> AIR=1]
<b>Vapor Pressure</b>	Approximately 20 mmHg [@ 20 °C]
<b>Specific Gravity</b>	Approximately 1.1 [ <i>Ref Std:</i> WATER=1]
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Solubility in Water</b>	Negligible
<b>Evaporation rate</b>	<i>No Data Available</i>
<b>Volatile Organic Compounds</b>	< 3 g/l [ <i>Test Method:</i> South Cost Air Qual Mgmt Dist] [ <i>Details:</i> Calc. @ 20 C.]
<b>Percent volatile</b>	< 2.5 %
<b>VOC Less H2O &amp; Exempt Solvents</b>	<i>Not Applicable</i>
<b>Viscosity</b>	Approximately 7600 centipoise [@ 20 °C]

**SECTION 10: STABILITY AND REACTIVITY**

**Stability:** Stable. Unstable if heated above 130 deg F, smoke and toxic fumes may be given off.

**Materials and Conditions to Avoid:** Strong acids; Amines

**Hazardous Polymerization:** Hazardous polymerization may occur. Additional Information: Heating in bulk over 130 F may cause exothermic polymerization. Store at 0 F or below to maintain product quality.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Oxides of Nitrogen	During Combustion
Toxic Vapor, Gas, Particulate	During Combustion

## SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Reclaim if feasible. Incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

**EPA Hazardous Waste Number (RCRA):** Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

## SECTION 14: TRANSPORT INFORMATION

**ID Number(s):**

98-0211-7277-4, 98-0211-7289-9, 98-0211-9328-3, 98-0212-3213-1, ZF-0002-0156-4

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

## SECTION 15: REGULATORY INFORMATION

**US FEDERAL REGULATIONS**

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - No Pressure Hazard - Yes Reactivity Hazard - Yes Immediate Hazard - Yes Delayed Hazard - Yes

**Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):**

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Toluene	108-88-3	< 2

**STATE REGULATIONS**

Contact 3M for more information.

**CALIFORNIA PROPOSITION 65**

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
Toluene	108-88-3	*Developmental Toxin

\* WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.

**CHEMICAL INVENTORIES**

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this product are listed on the Australian Inventory of Chemical Substances.

Contact 3M for more information.

**Additional Information:** The components of this product are in compliance with the chemical registration requirements of: CNDSL.

**INTERNATIONAL REGULATIONS**

This material contains one or more ingredients that may be regulated by the International Traffic in Arms Regulation (ITAR), an export control of US military technology and chemicals. Prior to export of this material or any product containing this material, determine whether a proper license from the Department of State must be obtained. See 22CFR 120-130 for any specific requirements.

Contact 3M for more information.

**This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

**SECTION 16: OTHER INFORMATION****NFPA Hazard Classification****Health: 3 Flammability: 1 Reactivity: 2 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**HMIS Hazard Classification****Health: 3 Flammability: 1 Reactivity: 2 Protection: X - See PPE section.**

Hazardous Material Identification System (HMIS(r)) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS(r) ratings are to be used with a fully implemented HMIS(r) program. HMIS(r) is a registered mark of the National Paint and Coatings Association (NPCA).

**Reason for Reissue:** The MSDS has been revised because 3M has adopted the 16-section ANSI/ISO format. The potential hazards of the product have not changed. We encourage you to reread the MSDS and review the information.

**Revision Changes:**

Copyright was modified.

Section 14: ID Number Heading Template 1 was added.

Section 14: ID Number(s) Template 1 was added.

Section 2: Ingredient table was added.

Section 15: EPCRA 313 information was added.

Section 15: EPCRA 313 text was added.

Section 8: Exposure guidelines ingredient information was added.

Section 8: Exposure guidelines legend was added.

Section 8: Exposure guideline note was added.

Section 8: Exposure guidelines data source legend was added.

Section 15: California proposition 65 ingredient information was added.

Section 15: California proposition 65 heading was added.

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