



# Factor II, Incorporated

Inventing and Innovating...  
(Information: 1.928.537.8387)  
ONLINE ORDERING [www.factor2.com](http://www.factor2.com)

## Material Safety Data Sheet MM-132 Part A Syntactic Dough

Factor II Technology urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to the use and understanding of the data contained in this MSDS.

To promote safe handling each customer or recipient should: (1) notify and furnish its employees, agents, contractors, customers, and others whom it knows or believes will use this material of the information regarding hazards or safety, (2) request its customers to notify their employees, customers and other users of the product of this information.

### I. PRODUCT IDENTIFICATION

PRODUCT NAME: MM-132 PART A  
PRODUCT CLASS: EPOXY RESIN  
CHEMICAL TYPE: BISPHENOL A-EPICHLOROHYDRIN POLYMER WITH GLYCIDYL ETHER DILUENTS

### II. HAZARDOUS INGREDIENTS

SUBSTANCE NAME & CAS NUMBER	OSHA TWA	ACGIH TWA	NIOSH	(CAS#)
Butandiol Diglycidyl Ether	NE	NE	NE	2425-79-8
Diglycidyl Ether of Bisphenol A	NE	NE	NE	25085-99-8
Alkyl (C12-C14) 2,3 Eposy-propane	NE	NE	NE	60801-84-5

### III. U.S. REGULATORY INFORMATION

TSCA Alt components of this product are registered under the regulations of the Toxic Substance Control Act.

SARA TITLE III, SECTION 313. Components present reportable under Section 313 and of 40 CFR 372: NONE

### IV. PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE Gray Paste  
SPECIFIC GRAVITY H<sub>2</sub>O=1: 0.82  
BOILING POINT B.P. >300° F  
VAPOR PRESSURE <.001 mm Hg @ 68 °F  
SOLUBILITY IN WATER Negligible  
V.O.C EPA Ref. Meth. 24: Negligible

### V. EMERGENCY AND FIRST AID PROCEDURES

IF IN EYE Flush eyes with Luke warm, running water for 15 minutes. Obtain immediate medical attention.

IF ON SKIN Remove contaminated clothing, wash affected area with mild soap & water twice..

INHALATION Remove to fresh air enviroment. Obtain medical attention if immediate or delayed irritation, or asthmatic symptoms occur.



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**INGESTION** Seek immediate medical attention. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

## Accidental Release Measures

**IN CASE OF FIRE** Do not breath fumes or smoke; wear cartridge filter respirator. See Section 7.  
**SPILL OR LEAK** Dike and soak up with absorbent material such as sand sweeping compounds or Fuller's earth.  
**DECONTAMINATION SOLUTION.** Alcohol, ammonia solution in water.

## VI. OCCUPATIONAL CONTROL RECOMMENDATIONS

**EYE PROTECTION** Safety glasses or goggles. Plastic face shield should be worn for complete face protection.  
**SKIN PROTECTION** Impermeable gloves. Avoid skin contact during all handling and usage.  
**RESPIRATORY PROTECTION.** Vapor TLV concentration must not be exceeded in work place. Use of OSHA approved cartridge filter respirator/mask or positive pressure supplied air respirator is recommended during any extensive handling.  
**VENTILATION** Local exhaust, or well ventilated work area must be provided.

## VII. FIRE HAZARD AND PROTECTION DATA

**FLASH POINT** 230° F PMCC  
**EXTINGUISHING MEDIA** Standard for chemical fires; water spray, dry chemical, CO2 or foam.  
**SPECIAL FIRE FIGHTING PROCEDURE.** Do not breath fumes or smoke; wear face mask with positive pressure air supply. Full protective gear should be worn for fighting large fires.  
**UNUSUAL FIRE/EXPLOSION HAZARD..** Decomposition and combustion products may be toxic.  
**FIRE-FIGHTING EQUIPMENT:** Firefighters should wear positive pressure self-contained breathing apparatus(SCBA) and consider use of Unmanned hose holders or monitor nozzles for fighting large fires.

## VIII. REACTIVITY DATA

**STABILITY** Stable at room temperature in closed containers under normal storage and handling conditions.  
**INCOMPATIBILITY-MATERIALS TO AVOID..** Oxidizing acids. Lewis acids, and metal organic compounds.  
**POLYMERIZATION** Hazardous polymerization will not occur.  
**HAZARDOUS DECOMPOSITION:** Thermal oxidative decomposition can produce toxic fumes/gases.

## VIII. HEALTH AND HAZARD DATA

**EYES** Redness, swelling, tearing, burning sensation  
**SKIN** Redness, swelling, sensitization is possible, rash may develop  
**INHALATION/INGESTION** Moderately toxic.  
**EXISTING MEDICAL CONDITIONS** Existing skin disorders, asthma; prior sensitization of skin



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## X. SPECIAL PRECAUTIONS, HANDLING, AND STORAGE DATA

HANDLING PRECAUTIONS Avoid skin contact; avoid inhalation of space over container, avoid excessive heating  
STORAGE TEMPERATURE (MIN/MAX). Store in cool dry place away from excessive heat in original or similar waterproof container.

SHELF LIFE 12 months under manufacturers recommended storage conditions  
STORAGE Keep container tightly closed; to prevent contamination with foreign materials

## XI. SPILL, LEAK, AND DISPOSAL PROCEDURES

SPILL OR LEAK PROCEDURES. Dike and soak up with absorbent such as sand sweeping compounds or Fuller's earth  
WASTE DISPOSAL Dispose in accordance with federal, state, and local regulations for hazardous materials

## TOXICOLOGICAL & ECOLOGICAL INFORMATION

No Information Available

## XII. SHIPPING INFORMATION

DOT SHIPPING NAME	Non restricted
DOT HAZARD CLASSIFICATION	Non-restricted
UN/NA NUMBER	None
IATA CLASSIFICATION	Non restricted
DOT LABELS REQUIRED	None

## EMERGENCY NOTICE

Contact CHEMTREC **only** in event of chemical emergencies of spills, leaks, fires, exposures, or accidents involving chemicals.  
CHEMTREC: 1 (800) 424-9300

**Disclaimer: This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Factor II, Inc. Factor II, Inc. assumes no legal responsibility for use or reliance upon these data.**



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## Material Safety Data Sheet MM-132 Part B Syntactic Dough

Factor II Technology urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to the use and understanding of the data contained in this MSDS.

To promote safe handling each customer or recipient should: (1) notify and furnish its employees, agents, contractors, customers, and others whom it knows or believes will use this material of the information regarding hazards or safety, (2) request its customers to notify their employees, customers and other users of the product of this information.

### I. PRODUCT IDENTIFICATION

PRODUCT NAME: MM-132 PART B  
PRODUCT CLASS: EPOXY HARDNER  
CHEMICAL TYPE: POLYAMINE/IMIDOZOL BASED

### II. HAZARDOUS INGREDIENTS

SUBSTANCE NAME	ICAS NUMBER	OSHA TWA	ACGIH TWA	NIOSH	(CAS#)
Triethylenetetramine		NE	NE	NE	0122-24-3
1,3 Bis (Aminomethyl) Cyclohexane		NE	NE	NE	2579-20-6
1 Methyl Imidazole		NE	NE	NE	00616-47-7
1,8 Diamino P Methane		NE	NE	NE	0080-52-4
		<b>HEALTH 1</b>	<b>FLAMMABILITY 1</b>		<b>REACTIVITY 0</b>

### III. U.S. REGULATORY INFORMATION

TSCA Alt components of this product are registered under the regulations of the Toxic Substance Control Act.  
SARA TITLE III, SECTION 313. Components present reportable under Section 313 and of 40 CFR 372: NONE

### IV. PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE Brown Paste  
Odor Ammonia  
SPECIFIC GRAVITY H<sub>2</sub>O=1: 0.79  
BOILING POINT B.P. >400° F  
VISCOSITY Thixotropic  
VAPOR PRESSURE N/A  
SOLUBILITY IN WATER Negligible  
V.O.C EPA Ref. Meth. 24: N/A

### V. EMERGENCY AND FIRST AID PROCEDURES

IF IN EYE Flush eyes with Luke warm, running water for 15 minutes. Obtain immediate medical attention.



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IF ON SKIN Remove contaminated clothing, wash affected area with mild soap & water twice..  
INHALATION Remove to fresh air environment. Obtain medical attention if immediate or delayed irritation, or asthmatic symptoms occur.  
INGESTION Seek immediate medical attention. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

## Accidental Release Measures

IN CASE OF FIRE Do not breath fumes or smoke; wear cartridge filter respirator. See Section 7.  
SPILL OR LEAK Dike and soak up with absorbent material such as sand sweeping compounds or Fuller's earth.  
DECONTAMINATION SOLUTION. Alcohol, ammonia solution in water.

## VI. OCCUPATIONAL CONTROL RECOMMENDATIONS

EYE PROTECTION Safety glasses or goggles. Plastic face shield should be worn for complete face protection.  
SKIN PROTECTION Impermeable gloves. Avoid skin contact during all handling and usage.  
RESPIRATORY PROTECTION. Vapor TLV concentration must not be exceeded in work place. Use of OSHA approved cartridge filter respirator/mask or positive pressure supplied air respirator is recommended during any extensive handling.  
VENTILATION Local exhaust, or well ventilated work area must be provided.

## VII. FIRE HAZARD AND PROTECTION DATA

FLASH POINT 225° F PMCC  
EXTINGUISHING MEDIA Standard for chemical fires; water spray, dry chemical, CO2 or foam.  
HAZARDOUS CLASSIFICATION Class 8, PGIII  
SPECIAL FIRE FIGHTING PROCEDURE. Do not breath fumes or smoke; wear face mask with positive pressure air supply. Full protective gear should be worn for fighting large fires.  
UNUSUAL FIRE/EXPLOSION HAZARD.. Decomposition and combustion products may be toxic.

## VIII. REACTIVITY DATA

STABILITY Stable at room temperature in closed containers under normal storage and handling conditions.  
INCOMPATIBILITY-MATERIALS TO AVOID.. Oxidizing acids. Lewis acids, and metal organic compounds. peroxides  
POLYMERIZATION Hazardous polymerization will not occur.  
HAZARDOUS DECOMPOSITION: Thermal oxidative decomposition can produce toxic fumes/gases.

## VIII. HEALTH AND HAZARD DATA

EYES Redness, swelling, tearing, burning sensation, Mildly corrosive  
SKIN Redness, swelling, sensitization is possible, rash may develop  
INHALATION/INGESTION Not Likely, Moderately toxic.  
EXISTING MEDICAL CONDITIONS Existing skin disorders, asthma; prior sensitization of skin

**HEALTH: 3**                      **FLAMMABILITY 1**                      **REACTIVITY 0**



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STORAGE TEMPERATURE (MIN/MAX). Store in cool dry place away from excessive heat in original or similar waterproof container.  
SHELF LIFE 12 months under manufacturers recommended storage conditions  
STORAGE Keep container tightly closed; to prevent contamination with foreign materials

## XI. SPILL, LEAK, AND DISPOSAL PROCEDURES

SPILL OR LEAK PROCEDURES. Dike and soak up with absorbent such as sand sweeping compounds or Fuller's earth  
WASTE DISPOSAL Dispose in accordance with federal, state, and local regulations for hazardous materials

## TOXICOLOGICAL & ECOLOGICAL INFORMATION

No Information Available

## XII. SHIPPING INFORMATION

DOT SHIPPING NAME	Corrosive liquid, n.o.s.
TECHNICAL NAME:	Triethylenetetramine Solution
DOT HAZARD CLASSIFICATION	Class 8, PGIII
UN/NA NUMBER	1759
IATA CLASSIFICATION	Class 8, PGIII
DOT LABELS REQUIRED	Corrosive

## EMERGENCY NOTICE

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