

MATERIAL SAFETY DATA SHEET

MS-50 BASE COMPONENT

Document # 3240

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SECTION 1: PRODUCT IDENTIFICATION AND USE

MFG'S NAME: ITW AMERICAN SAFETY TECHNOLOGIES
565 Eagle Rock Ave.
Roseland, New Jersey 07068
(973) 403-2600

TRADE NAME: MS-50
BASE COMPONENT

CHEMICAL FAMILY: EPOXY

DOT SHIPPING CLASSIFICATION (49 CFR 172.101): Paint,3,UN1263,III
TRANSPORTATION EMERGENCY NUMBER (CHEMTREC): 1-800-424-9300
MFG'S DUNN'S NO: 002-171-213
SPECIFICATION: MIL-PRF-24667A

HMIS RATING:
Health = 2
Flammability = 3
Reactivity = 0

PREPARED BY: J. Hermele

DATE: 12/8/00

REVISION: 4

SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

INGREDIENTS	CAS NO.	% WT.	OSHA	ACGIH	OTHER
Bisphenol-A-Diglycidyl Ether	25068-38-6	15-25%	N.E.	N.E.	LD50RAT>5g/Kg(Oral)
Aliphatic Monoglycidyl Ether	68609-97-2	5-10%	N.E.	N.E.	
Zinc Phosphate	7779-90-0	5-10%	10mg/m3 dust	10mg/m3 dust	
Magnesium Silicate	14807-96-6	10-15%	2mg/m3 dust	2mg/m3 dust	
Alumino Silicate Mineral	37244-96-5	15-20%	10mg/m3 dust	10mg/m3 dust	
Aromatic Naphtha	64742-95-6	5-10%		100ppm	
Methyl-N-Amyl Ketone	110-43-0	5-10%		100ppm	
1-Methoxy-2-Propanol	107-98-2	<5%		100ppm	

* Contains less than 0.1% Crystalline Silica

(N.E. = Not Established)

SECTION 313 SUPPLIER INFORMATION: THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372. (THIS INFORMATION MUST BE INCLUDED ON THE MSDS COPIED AND DISTRIBUTED FOR THIS MATERIAL).

<u>CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
Zinc Phosphate	7779-90-0	5-10%

SECTION 3: PHYSICAL DATA

BOILING POINT: >240°F/116°C
VAPOR PRESSURE: 8mmHg@68F/20C
VAPOR DENSITY: 3.7 (AIR = 1)
SOLUBILITY IN WATER: Partially Soluble
APPEARANCE AND ODOR: Pigmented Paste, Solvent Odor

SPECIFIC GRAVITY: 1.32
MELTING POINT: N.E.
EVAPORATION RATE: 0.7 (Butyl Acetate = 1)

SECTION 4: FIRE AND EXPLOSION HAZARD

FLASH POINT: 81°F/27°C PMCC
FLAMMABLE LIMITS: LEL UEL
1.0 7.0

EXTINGUISHING MEDIA: Chemical Foam or Dry Chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Remove all ignition sources. Wear self-contained breathing apparatus and complete personal protective equipment where potential for exposure to vapors or products of combustion exists.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS: Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. Decomposition and combustion products may be toxic.

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SECTION 5: HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Inhalation/Skin/Ingestion

HEALTH HAZARDS (ACUTE AND CHRONIC)

Eyes: May cause injury.
Skin: May cause moderate irritation and sensitization.
Inhalation: Vapors may cause headaches, nausea, dizziness and respiratory track irritation.
Ingestion: No specific information available. Contains materials that may be slightly toxic.

CONDITIONS AGGRAVATED BY EXPOSURE: Allergy, eczema and other skin conditions.

CARCINOGENIC DATA: Not on NTP, IARC or OSHA Lists.

OVEREXPOSURE EFFECTS: Irritation, sensitization and dermatitis.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes: Flush with large quantities of water for at least 15 minutes. Get medical attention.
Skin: Remove contaminated clothing. Wash contact area with mild soap and water for 15 minutes.
Inhalation: Remove to fresh air. If breathing has stopped administer artificial respiration and seek medical attention.
Ingestion: Do not induce vomiting (contains solvent). Get medical attention.

SECTION 6: REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Excessive Heat

INCOMPATIBILITY (Materials to Avoid): Strong Oxidizing Agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide and Aldehydes.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 7: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate all ignition sources. Dike Spill. Absorb with inert material and collect for disposal. Flush contaminated area with water; prevent washings from entering waterways.

WASTE DISPOSAL METHODS: This product, if disposed as shipped, meets EPA criteria of a hazardous waste as specified in 40 CFR 261 on the basis of its ignitability. Dispose of in a licensed hazardous waste facility in accordance with applicable laws.

SECTION 8: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NIOSH/MSHA approved respirator with organic vapor cartridge if required.

VENTILATION: Explosion-proof mechanical ventilation and local exhaust are recommended. Mechanical exhaust is not recommended as the sole means of controlling employee exposure.

PROTECTIVE GLOVES: Impervious gloves.

EYE PROTECTION: Chemical splash-proof goggles.

OTHER PROTECTIVE EQUIPMENT: In operations where contact may occur, coveralls, apron and impervious foot covering are recommended.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Avoid all personal contact. Do not exceed 110°F/43°C in storage area. Ground and bond metal containers for liquid transfer to avoid static sparks.

SECTION 9: SPECIAL / OTHER INSTRUCTIONS

- * A safety shower and eye wash facility should be available to employees.
- * Contaminated clothing should be removed immediately and thoroughly laundered before reuse.

MATERIAL SAFETY DATA SHEET

MS-50 HARDENER COMPONENT

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SECTION 1: PRODUCT IDENTIFICATION AND USE

MFG'S NAME: **ITW AMERICAN SAFETY TECHNOLOGIES**

565 Eagle Rock Ave.
Roseland, New Jersey 07068
(973) 403-2600

TRADE NAME: **MS-50
HARDENER COMPONENT**

CHEMICAL FAMILY: **EPOXY**

DOT SHIPPING CLASSIFICATION (49 CFR 172.101): Paint,3,UN1263,III
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Flammability =2
Reactivity =0

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DATE: 12/8/00

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SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

INGREDIENTS	CAS NO.	% WT.	OSHA	ACGIH
Polyamide Resin	68424-41-9	60-70%	N.E.	N.E.
Amidoamine Resin	68443-08-3	16%	N.E.	N.E.
1-Methoxy-2-propanol	107-98-2	10-25%	N.E.	100 ppm

(N.E. = Not Established)

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<u>Chemical Name</u>	<u>CAS. Number</u>	<u>Weight %</u>
None		

SECTION 3: PHYSICAL DATA

BOILING POINT: 244°F/118°C **SPECIFIC GRAVITY:** 0.96
VAPOR PRESSURE: 4.3 mmHg **MELTING POINT:** N.E.
VAPOR DENSITY: 2.6 (AIR = 1) **EVAPORATION RATE:** 0.45 (Butyl Acetate = 1)
SOLUBILITY IN WATER: Partially Soluble.
APPEARANCE AND ODOR: Amber Liquid, Solvent Odor

SECTION 4: FIRE AND EXPLOSION HAZARD

FLASH POINT: 100°F/38°C PMCC **FLAMMABLE LIMITS:** $\frac{LEL}{2.0}$ $\frac{UEL}{12.0}$

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Chemical Foam or Water.

SPECIAL FIRE FIGHTING PROCEDURES: Eliminate all ignition sources. Wear complete personal protective equipment including self-contained breathing apparatus where potential for exposure to vapors or products of combustion exists.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS: Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. Decomposition and combustion products may be toxic.

MS-50 HARDENER COMPONENT

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SECTION 5: HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Inhalation/Skin/Ingestion.

HEALTH HAZARDS (ACUTE AND CHRONIC)

Eyes: Causes severe irritation or burns. May cause permanent visual impairment.
Skin: Causes severe irritation or burns. May be absorbed through skin in harmful amounts.
Inhalation: May cause upper respiratory tract irritation.
Ingestion: May cause burns of mouth and throat. Contains material that may be slightly toxic.

CONDITIONS AGGRAVATED BY EXPOSURE: Allergy, eczema and other skin conditions.

CARCINOGENIC DATA: Not on NTP, IARC or OSHA Lists.

OVEREXPOSURE EFFECTS: Irritation, sensitization and dermatitis.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes: Flush with large quantities of water for at least 15 minutes. Get medical attention.
Skin: Remove contaminated clothing. Wash contact area with mild soap and water for 15 minutes.
Inhalation: Remove to fresh air. If symptoms persist consult a physician.
Ingestion: Do not induce vomiting (contains solvent). If conscious, give large quantities of water to dilute. Get medical attention.

SECTION 6: REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Excessive Heat

INCOMPATIBILITY (Materials to Avoid): Strong Oxidizing Agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide and Oxides of Nitrogen.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 7: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Dike Spill. Absorb with inert material and collect for disposal. Flush contaminated area with water; prevent washings from entering waterways.

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