

MATERIAL SAFETY DATA SHEET

T-10/T-100/EU-100 HARDENER COMPONENT

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SECTION 1: PRODUCT IDENTIFICATION AND USE

MFG'S NAME: ITW AMERICAN SAFETY TECHNOLOGIES INC. **TRADE NAME:** T-10/T-100/EU-100
565 Eagle Rock Ave. **HARDENER COMPONENT**
Roseland, New Jersey 07068
(973) 403-2600 **CHEMICAL FAMILY:** EPOXY

DOT SHIPPING CLASSIFICATION (49 CFR 172.101): (Not Regulated)
TRANSPORTATION EMERGENCY NO. (CHEMTREC): 1-800-424-9300
MFG'S DUNN'S NO: 002-171-213

HMIS RATING:
HEALTH =2
FLAMMABILITY=1
REACTIVITY =0

NATIONAL STOCK NO: **SPEC:** (Type, Grade, or Class) **CONTRACT OR ORDER NO.**
MIL-D-24613 Type I Class 1 & 3
MIL-D-3134 Type I Class 2
MIL-D-3135 Type I/II Class 2

PREPARED BY: J. Farrell **DATE:** 07/08/06 **REVISION:** 3

SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

INGREDIENTS	CAS NO.	% WT.	OSHA	ACGIH
Propoxylated Triethylenetetramine	26950-63-0	>80	N.E.	N.E.
Triethylene Tetramine	112-24-3	<20	N.E.	N.E.

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.

(N.E. = Not Established)

<u>CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
None		

SECTION 3: PHYSICAL DATA

BOILING POINT: > 200 F/93 C **SPECIFIC GRAVITY:** 1.02
VAPOR PRESSURE: < 0.01mmHg @ 68 F/20 C **MELTING POINT:** N.A.
VAPOR DENSITY: N.A. (AIR = 1) **EVAPORATION RATE:** N.A. (Butyl Acetate = 1)
SOLUBILITY IN WATER: Miscible
APPEARANCE AND ODOR: Yellow Liquid, Amine Odor

(N.A. = Not Applicable)

SECTION 4: FIRE AND EXPLOSION HAZARD

FLASH POINT: > 340 F/171 C PMCC **FLAMMABLE LIMITS:** LEL UEL
N.E. N.E.

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

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

UNUSUAL FIRE AND EXPLOSIVE HAZARDS: Decomposition and combustion products may be toxic.

T-10/T-100/EU-100 HARDENER COMPONENT

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SECTION 5: HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Inhalation/Skin

HEALTH HAZARDS (ACUTE AND CHRONIC)

Eyes: Moderate eye irritant, causes irritation, redness and discomfort which is transient.
Skin: Irritant. May cause sensitization and/or allergic skin reaction which can be severe in certain individuals.
Inhalation: Causes upper respiratory tract irritation and mucous membrane irritation.
Ingestion: No specific information available. 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 and wash contact area with mild soap and water. If irritation develops or persists, get medical attention.
Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen.
Ingestion: Get immediate medical attention. If conscious, give large quantities of water to dilute, but do not induce vomiting.

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, Aldehydes 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: Avoid all personal contact. Dike Spill. Absorb with inert material and collect for disposal. Flush contaminated area with water; prevent washings from entering waterways.

WASTE DISPOSAL METHODS: Dispose of in accordance with Federal, State and Local Regulations.

SECTION 8: SPECIAL PROTECTION INFORMATION

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

VENTILATION: 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.

SECTION 9: SPECIAL / OTHER INSTRUCTIONS

- * A safety shower and eye wash facility should be available to employees.
- * Immediately remove and thoroughly launder contaminated clothing before reuse.

MATERIAL SAFETY DATA SHEET

T-10/T-100/EU-100 BASE 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: T-10/T-100/EU-100
BASE COMPONENT

CHEMICAL FAMILY: EPOXY

DOT SHIPPING CLASSIFICATION: (Not Regulated)
TRANSPORTATION EMERGENCY NO. (CHEMTREC): 1-800-424-9300
MFG'S DUNN'S NO: 002-171-213

HMIS RATING:
Health =2
Flammability =1
Reactivity =0

NATIONAL STOCK NO: SPEC: (Type, Grade, or Class)
MIL-D-24613 Type I Class 1 & 3
MIL-D-3134 Type I Class 2
MIL-D-3135 Type I/II Class 2

CONTRACT OR ORDER NO.

PREPARED BY: J. Farrell

DATE: 07/08/06

REVISION: 4

SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

INGREDIENTS	CAS NO.	% WT.	OSHA	ACGIH	OTHER
Epoxy Resin	25068-38-6	70-100	N.E.	N.E.	LD50RAT >5g/kg (Oral)
Aliphatic Monoglycidyl Ether	68609-97-2	0-30%	N.E.	N.E.	LD50RAT >17g/kg (Oral)
Dodecachloro Cyclo Octene	13560-89-9	5-10%	N.E.	N.E.	LD50RAT >25g/kg (Oral)

(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>
None		

SECTION 3: PHYSICAL DATA

BOILING POINT: > 300°F/149°C **SPECIFIC GRAVITY:** 1.1
VAPOR PRESSURE: < 1.0mmHg @ 68°F/20°C **MELTING POINT:** N.A.
VAPOR DENSITY: N.A. (AIR = 1) **EVAPORATION RATE:** < 1.0(Butyl Acetate = 1)
SOLUBILITY IN WATER: Insoluble
APPEARANCE AND ODOR: Hazy Clear Liquid, Mild Odor
(N.A. = Not Applicable)

SECTION 4: FIRE AND EXPLOSION HAZARD

FLASH POINT: > 200°F/93°C PMCC **FLAMMABLE LIMITS:** LEL N.E. UEL N.E.

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

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

UNUSUAL FIRE AND EXPLOSIVE HAZARDS: Decomposition and combustion products may be toxic.

T-10/T-100/EU-100 BASE COMPONENT

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SECTION 5: HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Inhalation/Skin/Ingestion

HEALTH HAZARDS (ACUTE AND CHRONIC)

Eyes: Irritant
Skin: Irritant. May cause allergic skin reaction which can be severe in certain individuals.
Inhalation: May cause nose and throat 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 and get medical attention.
Skin: Remove contaminated clothing and wash contact area with mild soap and water.
Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen.
Ingestion: Give large quantities of water to dilute and induce vomiting. 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 and Carbon Dioxide.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 7: SPILL OR LEAK PROCEDURES

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

WASTE DISPOSAL METHODS: Dispose of in accordance with Federal, State and Local Regulations.

SECTION 8: SPECIAL PROTECTION INFORMATION

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

VENTILATION: 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 100°F/43°C in storage area.

SECTION 9: SPECIAL / OTHER INSTRUCTIONS

- * A safety shower and eye wash facility should be available to employees.
- * Immediately remove and thoroughly launder contaminated clothing before reuse.

EU-100 AGGREGATE COMPONENT

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SECTION 5: HEALTH HAZARD DATA (Cont'd).

HEALTH HAZARDS (ACUTE AND CHRONIC)

Inhalation: Health hazards occur from excessive inhalation. Crystalline silica in the lung can produce silicosis. Symptoms are dyspnea (caused by lung scars) pain in the chest, decreased vital capacity and cough.

Ingestion: N.E.

CONDITIONS AGGRAVATED BY EXPOSURE: Respiratory Diseases.

CARCINOGENIC DATA: This product contains silicon dioxide/silica. The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources," the overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1). NTP, in its Ninth Annual Report on Carcinogens, has classified "silica, crystalline (respirable)" to be a carcinogen." Crystalline silica is not regulated by OSHA as a carcinogen.

OVEREXPOSURE EFFECTS: Chronic lung scarring leads to a progressive massive fibrosis that is often accompanied by susceptibility to pulmonary tuberculosis and other respiratory infections.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes: Flush with large quantities of water to remove particles.

Skin: Wash with mild soap and water.

Inhalation: Remove to fresh air.

Ingestion: None.

SECTION 6: REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: N.E.

INCOMPATIBILITY (Materials to Avoid): Strong Alkalies, Metallic Oxides at high temperatures and Hydrofluoric Acid.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrofluoric Acid generates volatile Silicon Tetrafluoride.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 7: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use respiratory protection for airborne dust. Vacuum or scoop for recovery or disposal. Wetting spill with a water spray will help to keep dust levels down; use good ventilation if possible.

WASTE DISPOSAL METHODS: Not considered a hazardous waste; can be used as a soil sweetener.

SECTION 8: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NIOSH/MSHA approved disposable half-mask for dust/mist if required.

VENTILATION: Local exhaust as appropriate. Mechanical ventilation is recommended.

PROTECTIVE GLOVES: Leather or Rubber gloves.

EYE PROTECTION: Safety glasses or dust-tight goggles.

OTHER PROTECTIVE EQUIPMENT: An eye wash facility should be available in material handling area.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Use dustless system of storage and handling. Keep well-ventilated.

SECTION 9: SPECIAL / OTHER INSTRUCTIONS

CALIFORNIA PROPOSITION 65 INFORMATION: WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (Silicon Dioxide: Respirable Particles)