



MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BUEHLER TEM EPOXY ACTIVATOR
 IDENTIFICATION NUMBER: TEM EPOXY PART B 20-8151
 PRODUCT USE/CLASS: Epoxy activator

SUPPLIER:
 BUEHLER, a division of Illinois Tool Works Inc.
 41 WAUKEGAN ROAD
 LAKE BLUFF, IL 60044

EMERGENCY: 800-424-9300
 INFORMATION: 847-295-6500
 PREPARER: Technical Department, 847-295-6500
 PREPARE DATE: 3/29/2011, 29 March 2011

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME		CAS NUMBER	WT/WT%		
01	Imidazole blend		Proprietary	50-80		
02	Imidazole		288-32-4	25-50		
ITEM	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL - CEILING	COMPANY TLV-TWA	SKIN
01	N.E.	N.E.	N.E.	N.E.	N.E.	NO
02	N.E.	N.E.	N.E.	N.E.	N.E.	NO

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Harmful if swallowed. Causes eye burns. Causes skin burns. Vapors irritating to eyes and respiratory tract. May cause allergic skin or respiratory reaction.

ACUTE EFFECTS – EYE CONTACT: May cause corneal injury. May cause corneal damage.

ACUTE EFFECTS - SKIN CONTACT: Causes burns.

ACUTE EFFECTS – INHALATION: May cause irritation to the respiratory system

ACUTE EFFECTS - INGESTION: Ingestion will cause irritation of the gastrointestinal tract. If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Make victim drink plenty of water. Get immediate medical attention.

CHRONIC OVEREXPOSURE EFFECTS: Acute: Causes burns to skin and eyes. Causes serious eye irritation. Causes skin irritation. Ingestion will cause irritation of the gastrointestinal tract. Delayed and chronic effects: May cause corneal damage.

OTHER INFORMATION: No information.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT, INHALATION, INGESTION, EYE CONTACT

SECTION 4 – FIRST AID MEASURES

EYE CONTACT: Remove any contact lenses. Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.

SKIN CONTACT: Remove contaminated clothing immediately and drench affected skin with plenty of water, then wash with soap and water. If irritation (redness, rash, blistering) develops, get medical attention.

INHALATION: Remove patient from exposure. Keep patient at rest and give oxygen if breathing is difficult. If symptoms develop, obtain medical attention.

INGESTION: Remove patient from exposure. Keep patient at rest and give oxygen if breathing is difficult. If symptoms develop, obtain medical attention.

NOTES TO PHYSICIAN: Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

FLASH POINT: > 93.3° C / 200° F.

LOWER EXPLOSIVE LIMIT: N.A.

UPPER EXPLOSIVE LIMIT: N.A.

AUTOIGNITION TEMPERATURE: No data

EXTINGUISHING MEDIA: Extinguish preferably with dry chemical, foam or water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustion causes toxic fumes. A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions

SPECIAL FIREFIGHTING PROCEDURES: Wear a NIOSH approved positive pressure self-contained breathing apparatus with full protective clothing. Do not release runoff from fire control methods to sewers or waterways. Launder contaminated protective device

SECTION 6 – ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ensure full personal protection (including respiratory protection) during removal of spillages. Avoid breathing fumes. Evacuate if necessary. Transfer to a lidded container for disposal or recovery. Consult an accredited waste disposal contractor or the local authority for advice. Disposed of in accordance with applicable federal, state and local regulations.

SECTION 7 – HANDLING AND STORAGE

HANDLING: Use only in well-ventilated areas. Avoid inhalation of high concentrations of vapors. Keep away from oxidizing agents. Keep away from fire, sparks and heated surfaces - no smoking.

STORAGE: Protect from sunlight. Store in a well-ventilated place. Do not use or store near heat or open flame. Do not store and transport with oxidizers etc.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust as needed to control vapor or dust levels to below lowest component TLV.

RESPIRATORY PROTECTION: None normally required under general ventilation. If TLV/PEL is exceeded, if use is performed in a poorly-ventilated space, or if inhalation effects occur, use NIOSH-approved vapor cartridge respirator in accordance with applicable health and safety regulations and manufacturer's recommendations.

SKIN PROTECTION: Clean clothing to cover skin. Neoprene gloves. Nitrile gloves. Supported PVA gloves.

EYE PROTECTION: Eye protection (i.e., safety glasses, safety goggles and/or face shield) should be determined based on conditions of use.

OTHER PROTECTIVE EQUIPMENT: Accessible eye wash and safety shower.

HYGIENIC PRACTICES: Follow good general industrial safety practices during use.

Remove contaminated, saturated clothing immediately. Contaminated clothing should be thoroughly cleaned

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE:	272 - 493 F	VAPOR DENSITY:	Is heavier than air
ODOR:	Mild acrid	ODOR THRESHOLD:	No data
APPEARANCE:	Amber liquid	EVAPORATION RATE:	Is slower than Butyl Acetate
SOLUBILITY IN H ₂ O:	Negligible		
FREEZE POINT:	No data	SPECIFIC GRAVITY:	1.0201
VAPOR PRESSURE:	No data low	pH @ 0.0%:	N.A.
PHYSICAL STATE:	Liquid	VISCOSITY:	Low
COEFFICIENT OF WATER/OIL DISTRIBUTION:	No data		

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

SECTION 10 – STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Heat and direct sunlight. Avoid contact with heat and ignition sources.

INCOMPATIBILITY: Oxidizing agents, Can react violently if in contact with acids, alkalis, reducing agents and heavy metals. Bleaching products and comparable oxidizers. Can react violently if in contact with acids, alkalis, and reducing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen cyanide. Thermal decomposition will evolve toxic, irritant and flammable vapors.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 – TOXICOLOGICAL PROPERTIES

COMPONENT TOXICOLOGICAL INFORMATION

	LD50 (Oral, Rat)	LC50 (Inhalation, Rat)	LD50 (Dermal, Rat)
Imidazole BlendNot established Not establishedNot established
Imidazole 220 mg/kg Not establishedNot established

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity Harmful to aquatic life. Harmful to algae.

Persistence and degradability Moderately/partially biodegradable.

Bioaccumulative potential Moderately/partially biodegradable.

Mobility in soil The product has moderate mobility in soil.

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: If product becomes contaminated, follow disposal instructions for contaminant. Dispose of in accordance with federal, state and local regulations.

SECTION 14 – TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Corrosive Liquid, basic, organic, n.o.s.	
DOT TECHNICAL NAME: (Imidazole)	HAZARD SUBCLASS: None
DOT HAZARD CLASS: 8	PACKAGING GROUP: II
DOT UN/NA CLASS: UN3267	RESP. GUIDE PAGE: 153
INTERNATIONAL SHIPPING NAME: Corrosive Liquid, basic, organic, n.o.s. (Imidazole)	
INTERNATIONAL ID NUMBER: UN3267	
IMDG CLASS (1°, 2°): 8, none	IMDG PAGE NUMBER: II
IMDG EMS: N.D.	IATA CLASS (1°, 2°): 8, none

SECTION 15 – REGULATORY INFORMATION

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA – SARA HAZARD CATEGORY: THIS PRODUCT HAS BEEN REVIEWED, AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES:

IMMEDIATE HEALTH HAZARD CHRONIC HEALTH HAZARD

SARA SECTION 313: THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 AND 40 CFR PART 372:

CHEMICAL NAME -----CAS NUMBER

No SARA Section 313 components exist in this product.

CALIFORNIA PROPOSTION 65: This product contains the following substance(s) known to the state of California to cause cancer and/or reproductive harm; Acrylonitrile (CAS # 107-13-1), <0.05%.

CANADIAN WHMIS: THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH CONTROLLED PRODUCT REGULATIONS EXCEPT FOR USE OF THE 16 HEADINGS.

CANADIAN WHMIS CLASS: D2B,E

COMPONENT RCRA CLASSIFICATIONS: Not regulated

COMPONENT RCRA CODES: No information.

CERCLA RQ VALUE (MINIMUM): None known

SECTION 16 – OTHER INFORMATION

HMIS RATINGS

HEALTH: 2

FLAMMABILITY: 1

REACTIVITY: 1

PREVIOUS MSDS REVISION DATE: 3/29/2009, 29 March 2009

REASON FOR REVISION: Administrative change for new format. Revised section(s): 2, 3, 4, 6, 10, 11, 12, 15,

VOLATILE ORGANIC COMPOUNDS: 0 grams/ltr (calculated)

LEGEND:

N.A. – NO INFORMATION

N.E. – NOT ESTABLISHED

N.D. – NOT DETERMINED

ABBREVIATIONS: ACGIH = AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS; OSHA = OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION; TLV-TWA = THRESHOLD LIMIT VALUE – TIME WEIGHTED AVERAGE (8 HOURS); STEL = SHORT-TERM EXPOSURE LIMIT (15 MINUTES); C = CEILING VALUE; PEL = PERMISSIBLE EXPOSURE LIMIT

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