

**Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: 20 Minute Epoxy Hardener-EZ  
 Part Number: EZ-(all sizes)  
 Relevant Use: Laboratory Chemicals  
 Manufacturer: Sturbridge Metallurgical Services Inc.  
 City, State, Zip: Sturbridge MA 01566  
 Phone Number: 508-347-5288  
 Emergency Phone: **CHEMTREC 1-800-424-9300**

**Section 2: Hazard(s) Identification**

**Hazardous classification of the substance or mixture:**

Hazard Class	Category code
Acute Toxicity (Oral)	4
Acute Toxicity (Dermal)	4
Skin corrosion / Irritation	1A
Serious eye Damage / Eye Irritation	1
Respiratory Sensitization	1
Skin Sensitization	1
Toxic to Reproduction	2
Specific Target Organ Toxicity (Single Exposure) [eyes]	1
Specific Target Organ Toxicity (Repeated Exposure) [kidneys, liver, skin]	1

**Pictogram:**



**Signal word:** Danger

**Hazard Statements:**

- H302-Harmful if swallowed
- H312-Harmful in contact with skin
- H314-Causes severe skin burns and eye damage
- H318-Causes serious eye damage
- H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H317-May cause an allergic skin reaction.
- H361f-Suspected of damaging the unborn child
- H370-Causes damage to organs: (eyes)
- H372-Causes damage to organs through prolonged or repeated exposure

**Precautionary Statements:**

- P264- Wash skin thoroughly after handling.
- P270-Do not eat, drink, or smoke when using this product.
- P280- Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P260-Do not breathe dusts or mists
- P261-Avoid breathing dust/ fume/ gas/ mist/ vapours/ sprays
- P284-[In case of inadequate ventilation] wear respiratory protection.

**Response Statements:**

P301+P312-If swallowed: Call a Poison Center/doctor if you feel unwell.  
P301+P330+P331-If swallowed: Rinse mouth. Do NOT induce vomiting.  
P302+P352-If on skin wash with plenty water.  
P333+P313- If skin irritation occurs: Get medical advice/attention.  
P362+P364-Take off contaminated clothing and wash it before re-use.  
P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing.  
P342+P311-If experiencing respiratory symptoms: Call a Poison Center / doctor.  
P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313-If exposed or concerned: Get medical advice/attention.

**Storage Statement:**

P405-Store locked up  
P403+P233-Store in a well ventilated place. Keep container tightly closed.

**Disposal statement:**

P501-Dispose of contents in accordance with local, state, federal and international regulations.

**Other hazards:** None known

**HMIS Ratings:**

Health: 3  
Flammability: 1  
Reactivity: 0

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**Section 3: Composition/Information on Ingredients**

Chemical Name	CAS No.	% Concentration
Triethylenetetramine	112-24-3	100

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

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**Section 4: First-Aid Measures**

**First-aid measures general**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area

**First-aid measures after inhalation**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**First-aid measures after skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**First-aid measures after eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

**First-aid measures after ingestion**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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## **Section 5: Fire-Fighting Measures**

### **Suitable extinguishing media**

Use an extinguishing agent suitable for the surrounding fire.

### **Special hazards arising from the substance or mixture**

In a fire or if heated, a pressure increase will occur and the container may burst.

### **Hazardous thermal decomposition products**

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides

### **Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **Further Information**

Use water spray to cool unopened containers.

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## **Section 6: Accidental Release Measures**

### **Personal Precautions, Protective Equipment and Emergency Procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **Methods and materials for containment and cleaning up**

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

### **Reference to other sections**

For disposal see section 13.

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## **Section 7: Handling and Storage**

### **Precautions for safe handling**

Put on appropriate personal protective equipment (see section 8 of SDS). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

### **Conditions for safe storage, including any incompatibilities**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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## **Section 8: Exposure Controls/Personal Protection Exposure Limits**

**Occupational exposure limits**

Ingredient name	Exposure limits
Triethylenetetramine	AIHA WEEL (1999-01-01) Time Weighted Average (TWA) 1 ppm NIOSH REL (2005-09-30)

**Personal protective equipment**

**Eye/face protection-** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection-** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Body Protection**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Control of environmental exposure**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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**Section 9: Physical and Chemical Properties**

**Physical state:** Liquid

**Appearance:** Form: liquid, yellow

**Color:** Yellow

**Odor:** Amine

**Odor Threshold:** No data available

**pH:** 10-12

**Melting Point /Freezing Point:** -35°C (31.00-°F)

**Boiling Point:** 277°C (530.6°F)

**Flash Point:** Pensky-Martens Closed Cup: 122 °C (251.6 °F) (ASTM D 93)

**Relative evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Explosion limits:** No data available

**Explosive properties** No data available

**Oxidizing properties** No data available

**Vapor pressure:** 0.001 kPa @ 20 °C (68.0 °F)

**Vapor density:** 5 [Air=1]

**Relative density:** Not available

**Water Solubility:** Complete

**Auto-ignition temperature:** 335°C (635°F)

**Decomposition temperature:** No data available

**Viscosity:** Dynamic: 30 mPa's @20°C (68.0°F)

**Other:** No data available

**Section 10: Stability and Reactivity**

**Reactivity:** Stable under normal conditions

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid:** Keep away from heat, sparks, flame and other ignition sources. Exposure to water vapour.

**Incompatibilities:** No specific data

**Hazardous Decomposition Products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Section 11: Toxicological Information:****Acute Toxicity**

Product/Ingredient	Result	Species	Dose	Exposure
Triethylenetetramine	LD50 Oral	Rat	2,500 mg/kg	-

**Conclusion Summary:** Not available

**Irritation / Corrosion**

Product/Ingredient	Result	Species	Score	Exposure	Observation
Triethylenetetramine	Eyes Moderate Irritant	Rabbit		24 hrs.	-
	Skin Severe Irritant	Rabbit		24 hrs.	-
	Eyes Severe Irritant	Rabbit			-

**Conclusion Summary:** Not available

**Specific target organ toxicity (single exposure)**

Product/Ingredient	Category	Route of Exposure	Target Organs
Triethylenetetramine	1		Eyes

**Specific target organ toxicity (single exposure)**

Product/Ingredient	Category	Route of Exposure	Target Organs
Triethylenetetramine	1		Respiratory tract
	2		Skin, liver, kidneys

**Potential acute health effects**

**Eye** –Causes serious eye irritation.

**Inhalation**-May cause respiratory irritation.

**Skin Contact**-Causes skin irritation. May cause allergic skin reaction.

**Ingestion**- Harmful if swallowed. May cause burns to mouth, throat and stomach.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact**- Adverse symptoms may include the following: pain or irritation, watering and redness.

**Inhalation**- Adverse symptoms may include the following: wheezing and breathing difficulties, asthma, reduced fetal weight, increase in fetal deaths, skeletal malformations.

**Skin Contact**- Adverse symptoms may include the following: pain or irritation, redness, blistering may occur, reduced fetal weight, increase in fetal deaths, skeletal malformations.

**Ingestion**- Adverse symptoms may include the following: stomach pain, reduced fetal weight, increase in fetal deaths, skeletal malformations.

**Potential chronic health effects**

**General-** Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity, Mutagenicity, Developmental effects** -No known significant effects or critical hazards.

**Teratogenicity, Fertility effects**-Suspected of damaging the unborn child. Suspected of damaging fertility.

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**Section 12: Ecological Information****Toxicity-**

Product / Ingredient name	Result	Species	Exposure
3,6-diazaoctanethylenediamin	Acute LC50 33,900 µg/l Fresh water	Aquatic invertebrates. Water flea	48h
	Acute EC50 3,700 µg/l Fresh water	Aquatic plants – Green Algae	96h

**Persistence and degradability:** No data available

**Bioaccumulative potential:**

Product / Ingredient name	LogPow	BCF	Potential
Triethylenetetramine	-1.66 - -1.4		low

**Mobility in soil:** No data available

**Other adverse effects:** No known significant effects or critical hazards

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**Section 13: Disposal Considerations**

Dispose in a safe manner in accordance with all local/national regulations. Dispose of contents/container in accordance with all federal, state, and local health and environmental regulations.

Avoid release to the environment.

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**Section 14: Transportation Information****International transport regulations**

Regulatory Information	UN/NA Number	Proper Shipping name	Classes/*PG (packing group)	Reportable Quantity (RQ)
CFR	2259	TRIETHYLENETETRAMINE	Class 8 II	
TDG	2259	TRIETHYLENETETRAMINE	Class 8 II	
IMO/IMDG	2259	TRIETHYLENETETRAMINE	Class 8 II	
IATA (Cargo)	2259	TRIETHYLENETETRAMINE	Class 8 II	

**Special precautions for user-** Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.'

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**Section 15: Regulatory Information****U.S. Federal Regulations**

United States - TSCA 12(b) - Chemical export notification: None required.

United States - TSCA 5(a)2 - Final significant new use rules: Not listed

United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed

United States - TSCA 5(e) - Substances consent order: Not listed

**California Prop.65** – None required

**United States inventory (TSCA 8b)** – All components are listed or exempted

**Canada**

WHMIS (Canada)- Class D-1A: Material causing immediate and serious toxic effects (Very toxic).

Class D-2A: Material causing other toxic effects (Very toxic).

Class D-2B: Material causing other toxic effects (Toxic).

Class E: Corrosive material

**Canadian NPRI**- none required

**CEPA Toxic Substances**-none required

**International regulations**

**Australia inventory (AICS):** All components are listed or exempted.

**Canada inventory:** All components are listed or exempted.

**Japan inventory:** All components are listed or exempted.

**China inventory (IECSC):** All components are listed or exempted.

**Korea inventory:** All components are listed or exempted.

**New Zealand Inventory (NZIoC):** All components are listed or exempted.

**Philippines inventory (PICCS):** All components are listed or exempted.

**United States inventory (TSCA 8b):** All components are listed or exempted.

**Taiwan inventory (CSNN):** All components are listed or exempted.

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**Section 16: Other Information**

**Disclaimer:** The information above is believed to be accurate and represents the best information currently available to us. SMS, Inc. makes no warranty, express or implied, as to its accuracy, and we assumes no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. We shall not be liable for any damages to person or property resulting from its use.