



**\*\*\*MATERIAL SAFETY DATA SHEET\*\*\***

COMPOSITE TECHNOLOGY DEVELOPMENT, INC.  
2600 CAMPUS DRIVE, SUITE D  
LAFAYETTE, COLORADO 80026

EMERGENCY TELEPHONE NUMBER: (303) 664 0394

**1. PRODUCT IDENTIFICATION**

**Trade Name and Synonyms**  
CTD-522 and CTD-522-2X PART A

**Chemical Name and/or Family or Description**  
Formulated liquid epoxide resin

CHEMICAL IDENTITY TRADE SECRET. COMPOSITION WILL BE REVEALED TO A HEALTH PROFESSIONAL IN THE CASE OF A MEDICAL EMERGENCY.

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

**Special Health Effects - Carcinogenicity**  
Not a carcinogen as considered by NTP, IARC, or OSHA.  
This product contains less than 50 ppm Epichlorohydrin, a substance known to be a carcinogen in the State of California

CHEMICAL NAME	CAS #	RANGE %	EXPOSURE LIMITS
Epoxide Resin mixture	Trade secret	Trade secret	OSHA PEL - Not established OSHA STEL - Not established ACGIH TWA - Not established ACGIH STEL - Not established

**3. HAZARDS IDENTIFICATION**

**Emergency Overview:** Warning! Causes irritation. May cause allergic skin reactions.  
**Primary Route(s) of Entry:** Dermal

**4. FIRST AID MEASURES**

EYE	Flush eyes with water for at least 15 min. Get medical attention if irritation occurs.
SKIN CONTACT	Wipe away excess material with dry towel. Wash with mild soap and plenty of water. Get medical attention if irritation occurs.
INHALATION	Remove to fresh air. If breathing is difficult, or irritation occurs, get medical attention.
INGESTION	Give 3-4 glasses of water. Do not induce vomiting. Get medical attention.
OVEREXPOSURE EFFECTS	May cause moderate skin and mild eye irritation. May cause allergic skin reactions.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	Allergy, eczema or skin conditions



### 5. FIRE-FIGHTING MEASURES

FLASH POINT	> 200°F (> 93°C)
EXTINGUISHING MEDIA	CO <sub>2</sub> ; dry chemical; water spray; foam
SPECIAL FIREFIGHTING PROCEDURES	Use self-contained breathing apparatus
FIRE AND EXPLOSION HAZARDS	Combustion products may be toxic

### 6. ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE, BREAKAGE OR LEAK	Avoid all personal contact. Clean with absorbent material. Put into closeable containers. Flush area with water.
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### 7. HANDLING AND STORAGE

STORAGE TEMPERATURE	Minimum handling temperature for storage.
HANDLING/STORAGE	Store in cool, dry area in closed containers. Avoid breathing vapor, mist or spray. Use only with adequate ventilation. Eye wash and safety shower should be available nearby when product is handled. For industrial use only.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYES	Chemical goggles
SKIN	Lab coats or coveralls, and impervious rubber gloves. Use of barrier cream recommended.
INHALATION	Use NIOSH approved respirator suitable for organic vapors.
VENTILATION	General mechanical ventilation and local exhaust.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Liquid
APPEARANCE AND ODOR	Clear, slight odor
BOILING POINT	> 200°C (> 392°F)
SOLUBILITY IN WATER	Insoluble
SPECIFIC GRAVITY	Not determined
DECOMPOSITION TEMPERATURE	> 200°C (> 392°F)

### 10. STABILITY AND REACTIVITY

STABILITY	Stable
INCOMPATIBILITIES	Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon monoxide, carbon dioxide and aldehydes.
HAZARDOUS POLYMERIZATION	Will not occur
CONDITIONS TO AVOID	Strong acids or bases in bulk and elevated temperatures

### 11. TOXICOLOGICAL INFORMATION

ORAL LD <sub>50</sub>	> 5000 mg/kg - rat
DERMAL LD <sub>50</sub>	> 6000 mg/kg - rabbit
SKIN IRRITATION	Moderate irritation - rabbit



EYE IRRITATION  
SENSITIZATION

Slight irritation - rabbit  
Moderate sensitizer

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## 12. ECOLOGICAL INFORMATION

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Data not yet available

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## 13. DISPOSAL CONSIDERATIONS

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According to Federal, State, and Local regulations. This product is not considered to be a hazardous waste by RCRA.

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## 14. TRANSPORT INFORMATION

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DEPARTMENT OF TRANSPORTATION

Not regulated

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## 15. REGULATORY INFORMATION

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OSHA STATUS

This MSDS has been prepared in compliance with Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

RCRA

Not a hazardous waste under RCRA (40 CFR 261)

TSCA INVENTORY STATUS

Chemical components listed on TSCA Inventory

SARA/TITLE III:

This product does not contain a toxic chemical under SEC. 313 (40 CFR 372)

CERLA

Not listed

CALIFORNIA PROPOSITION 65

This product contains less than 50ppm Epichlorohydrin, a substance known to the State of California to cause cancer.

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## 16. OTHER INFORMATION

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FOR TECHNICAL INFORMATION CONTACT:

DR. NASEEM A. MUNSHI  
COORDINATOR OF PRODUCT SAFETY

COMPOSITE TECHNOLOGY DEVELOPMENT, INC  
2600 CAMPUS DRIVE, SUITE D  
LAFAYETTE, CO 80026  
(303) 664-0394

ISSUE DATE: 02/01/99  
REVISION DATE & NO.: 10/30/03

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA BELIEVED TO BE ACCURATE. HOWEVER, NO GUARANTEE OR WARRANTY OF ANY KIND EXPRESSED OR IMPLIED IS MADE WITH RESPECT TO THE INFORMATION CONTAINED HEREIN.



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2600 CAMPUS DRIVE, SUITE D  
LAFAYETTE, COLORADO 80026

EMERGENCY TELEPHONE NUMBER: (303) 664 0394

### 1. PRODUCT IDENTIFICATION

Trade Name and Synonyms  
CTD-522 and CTD-522-2X PART B  
Chemical Name and/or Family or Description  
Proprietary aliphatic amine mixture

CHEMICAL IDENTITY TRADE SECRET. COMPOSITION WILL BE REVEALED TO A HEALTH PROFESSIONAL IN THE CASE OF A MEDICAL EMERGENCY.

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Carcinogenicity**  
Not a carcinogen as considered by NTP, IARC, or OSHA.

CHEMICAL NAME	CAS #	RANGE %	EXPOSURE LIMITS
Poly(oxy(methyl-1,2-ethanediyl),alpha-hydro-omega-(2-aminomethylethoxy)-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propandiol (3:1)	3942351-3	> 50	OSHA - Not established ACGIH - Not established STEL - Not noted CEIL - Not noted

### 3. HAZARDS IDENTIFICATION

**Emergency Overview:** Corrosive. Causes skin and eye burns. Harmful or fatal if swallowed. May cause allergic skin reaction. Can cause lung damage if swallowed.

### 4. FIRST AID MEASURES

EYE	Flush eyes with water for at least 15 min. Get medical attention immediately.
SKIN CONTACT	Remove contaminated clothing and shoes. Wash with mild soap and plenty of water. Get medical attention immediately.
INHALATION	Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, give oxygen, and get medical attention.
INGESTION	Give 2-3 glasses of water. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Get medical attention.

### 5. FIRE-FIGHTING MEASURES

FLASH POINT	385°F PMCC
EXTINGUISHING MEDIA	CO <sub>2</sub> ; dry chemical; water spray; foam



SPECIAL FIREFIGHTING PROCEDURES

Use self-contained breathing apparatus and protective clothing

FIRE AND EXPLOSION HAZARDS

Combustion products may be toxic

## 6. ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE, BREAKAGE OR LEAK

Avoid all personal contact. Absorb onto absorbent material. Shovel into closeable containers. Flush area with water. Do not flush residue into sewers discharging into domestic water systems or natural waterways. Wear protective equipment. Ventilate area.

## 7. HANDLING AND STORAGE

STORAGE TEMPERATURE

If stored above 100°F, a nitrogen atmosphere recommended.

HANDLING/STORAGE

Store in cool, dry area in closed containers. Avoid breathing vapor, mist or spray. Use only with adequate ventilation. Eye wash and safety shower should be available nearby when product is handled. For industrial use only.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYES

Chemical goggles; do not wear contact lenses.

SKIN

Lab coats or coveralls, and impervious rubber gloves.

INHALATION

Use NIOSH approved respirator suitable for organic vapors.

VENTILATION

Local Exhaust.

EXPOSURE LIMIT FOR PRODUCT

Not established

## 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM

Liquid

APPEARANCE AND ODOR

Clear; ammoniacal odor

SOLUBILITY IN WATER

Soluble

SPECIFIC GRAVITY

Not determined

BOILING POINT

Not determined

DECOMPOSITION TEMPERATURE

&gt; 250°C

## 10. STABILITY AND REACTIVITY

STABILITY

Stable

INCOMPATIBILITIES

Strong oxidants, strong acids

HAZARDOUS DECOMPOSITION PRODUCTS

Ammonia, carbon monoxide, nitric oxides

HAZARDOUS POLYMERIZATION

Will not occur

CONDITIONS TO AVOID

This material reacts violently with acids

## 11. TOXICOLOGICAL INFORMATION

ORAL LD<sub>50</sub>

&gt; 0.2 g/kg rat - toxic

DERMAL LD<sub>50</sub>

&gt; 0.6 g/kg (rabbit) - moderately toxic

INHALATION

Believed to be practically non-toxic



SKIN IRRITATION  
EYE IRRITATION  
SENSITIZATION

Corrosive; may cause burns  
Extremely irritating  
Negative

## 12. ECOLOGICAL INFORMATION

Data not yet available

## 13. DISPOSAL CONSIDERATIONS

According to Federal, State, and Local regulations. Not a hazardous waste under RCRA.

## 14. TRANSPORT INFORMATION

DOT SHIPPING NAME	Amines, liquid, corrosive, N.O.S. (contains polyoxypropylenetriamine)
DOT HAZARD CLASS	8
UN IDENTIFICATION NUMBER	2735
PACKING GROUP	III
LABEL REQUIRED	Corrosive

## 15. REGULATORY INFORMATION

OSHA STATUS	This MSDS has been prepared in compliance with Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.
RCRA	Not a hazardous waste under RCRA (40 CFR 261)
TSCA INVENTORY STATUS	Chemical components listed on TSCA Inventory
SARA/TITLE III:	This product does not contain a toxic chemical under SEC. 313 (40 CFR 372)
CERLA	Not listed
CALIFORNIA PROPOSITION 65	This product does not contain any substance known to the State of California to cause cancer or adverse reproductive effects.

## 16. OTHER INFORMATION

FOR TECHNICAL INFORMATION CONTACT:	DR. NASEEM A. MUNSHI COORDINATOR OF PRODUCT SAFETY
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