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## Material Safety Data Sheet

### 1. PRODUCT IDENTIFICATION

**Product Name:** 21425 FAST CURE EPOXY PART 1  
**Item No:** 150345E  
**Product Type:** Epoxy

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	ACGIH; TLV-TWA	OSHA PEL
BISPHENOL A/EPICHLOROHYDRIN BASED EPOXY RESIN 25068-38-6	30-60	Not listed	Not listed
ALUMINUM HYDROXIDE 21645-51-2	40-50	10 mg/m <sup>3</sup> TWA (dust)	Not listed
TITANIUM DIOXIDE 13463-67-7	<7	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>
EPOXY RESIN 28906-96-9	<3	Not listed	Not listed

### 3. HAZARDS IDENTIFICATION

**Toxicity:** May cause eye, skin and respiratory irritation. May cause skin sensitization. Contact at elevated temperatures can cause permanent damage to eyes including blindness.

**Primary Routes of Entry:** Eye and skin contact, ingestion, inhalation

**Signs and Symptoms of Exposure:** Eyes: Exposure to liquid or vapor causes mild eye irritation. Symptoms may include burning, tearing, redness, stinging, blurred vision and corneal injury. Repeated skin contact may cause allergic skin reactions. Ingestion may cause nausea and vomiting.

Component	Weight%	NTP	ACGIH Carcinogens	IARC
TITANIUM DIOXIDE 13463-67-7	<7	male rat-negative, female rat-negative, male mice-negative, female mice-negative	A4	Group 2B; Vol 93,2006; Vol 47,1989

**Medical Conditions Recognized as Being Aggravated by Exposure:** Preexisting eye, skin and respiratory disorders may be aggravated by overexposure to this product.

### 4. FIRST AID MEASURES

**Ingestion:** Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours. If not breathing, give artificial respiration. Obtain medical attention.

**Skin Contact:** In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.

**Eye Contact:** Flush eyes with clean water for at least 20 minutes while gently holding eyelids open, lifting upper and lower lids.

### 5. FIRE FIGHTING MEASURES

**Flash Point °F(C°):** >400°F (204.4°C) PMCC

**Recommended Extinguishing Media:** Carbon Dioxide, Dry Chemicals, Foam.

**Special Fire-Fighting Procedures:** Material will not burn unless preheated. Firefighters should wear self-contained breathing apparatus and protective clothing to prevent all skin and eye contact.

**Hazardous Products of Combustion:** When heated to decomposition it emits fumes of Cl-, carbon monoxide, other fumes and vapors varying in composition and toxicity

**Unusual Fire/Explosion Hazards:** Heating above 300°F in the presence of air may cause slow oxidation decomposition and above 500°F may cause polymerization.

## 5. FIRE FIGHTING MEASURES

**Lower Explosive Limit:** Not determined  
**Upper Explosive Limit:** Not determined

## 6. ACCIDENTAL RELEASE MEASURES

**Spill Procedures:** Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal. Prevent from entering waterways or sewers.

## 7. HANDLING AND STORAGE

**Storage:** Store away from heat.  
**Handling:** Avoid contact with skin and eyes. Use only in a well ventilated area. Avoid contact with vapors from heated material. Wash hands before eating and smoking. Discard contaminated leather gloves and shoes.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Eyes:** Safety glasses.  
**Skin:** Neoprene or nitrile gloves recommended.  
**Ventilation:** General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.  
**Respiratory Protection:** An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Black viscous liquid  
**Odor:** Slight  
**Boiling Point:** >500°F (260°C)  
**pH:** Neutral  
**Solubility in Water:** Negligible  
**Specific Gravity:** 1.53  
**VOC(Wt.%):** <1% by weight  
**Vapor Pressure:** 0.03 mm Hg @ 171°F  
**Vapor Density (Air=1):** >1  
**Evaporation Rate:** <1 (butyl acetate = 1)

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable at normal conditions  
**Hazardous Polymerization:** Will not occur.  
**Incompatibilities:** Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines)  
**Conditions to Avoid:** Heat  
**Hazardous Products of Combustion:** When heated to decomposition it emits fumes of Cl-, carbon monoxide, other fumes and vapors varying in composition and toxicity

## 11. TOXICOLOGICAL INFORMATION

See Section 3

## 12. ECOLOGICAL INFORMATION

No data available

## 13. DISPOSAL CONSIDERATIONS

**Recommended Method of Disposal:** Disposal should be made in accordance with federal, state and local regulations..  
**US EPA Waste Number:** NH - Not a RCRA Hazardous Waste Material

## 14. TRANSPORTATION INFORMATION

**DOT (49CFR 172)**  
**Ground Transport (DOT)**  
**DOT Shipping Name:**  
**Hazard Class:**

Unrestricted  
None

**14. TRANSPORTATION INFORMATION**

**UN/ID Number:** None

**IATA**

**Proper Shipping Name:** Not Regulated  
**Class or Division:** None  
**UN/ID Number:** None

**IMDG**

**Proper Shipping:** Unrestricted  
**Hazard Class:** None  
**UN Number:** None

**Marine Pollutant:** None

**15. REGULATORY INFORMATION**

**SARA 313 Chemicals:** The following component(s) is listed as a SARA Section 313 Toxic Chemical.

NONE

**CALIFORNIA PROP 65:**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**TSCA Inventory Status:** All components of this product are listed (or exempt) on the EPA TSCA inventory.

**16. OTHER INFORMATION**

**Estimated NFPA Rating:** HEALTH 2, FLAMMABILITY 1, REACTIVITY 1.  
**Estimated HMIS Classification:** HEALTH 2, FLAMMABILILTY 1, PHYSICAL HAZARD 0  
NFPA is a registered trademark of the National Fire Protection Assn.  
HMIS is a registered trademark of the National Paint and Coatings Assn.

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## Material Safety Data Sheet

### 1. PRODUCT IDENTIFICATION

**Product Name:** 21425 FAST CURE EPOXY PART 2  
**Item No:** 150445E  
**Product Type:** Epoxy

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	ACGIH; TLV-TWA	OSHA PEL
ALUMINUM HYDROXIDE 21645-51-2	40-50	10 mg/m <sup>3</sup> TWA (dust)	Not listed
POLYMERCAPTAN CURING AGENT Proprietary	20-40	Not listed	Not listed
2,4,6- TRIS(DIMETHYLAMINOMETHYL)P HENOL 90-72-2	<10	Not listed	Not listed
BENZYL ALCOHOL 100-51-6	<10	Not listed	Not listed
STYRENE 100-42-5	<5	20 ppm	100 ppm

### 3. HAZARDS IDENTIFICATION

**Toxicity:** Corrosive. Severe irritation or burns, necrosis, blistering and permanent injury. Product can be absorbed through the skin and may cause nausea, headache and general discomfort. May cause lacrimation, conjunctivitis, corneal damage and may cause permanent injury (i.e. blindness). If the hardener is poorly ventilated, strongly heated or atomized, the vapor or mist can cause severe irritation of the respiratory tract, damage contacted tissue and produce scarring. Coughing and chest pain may result, nausea and vomiting in severe cases. Causes severe damage to mucous membranes if swallowed. May cause malaise, headache, discomfort, bleeding and vomiting of blood.

**Primary Routes of Entry:** Eye and skin contact, ingestion, inhalation

**Signs and Symptoms of Exposure:** Overexposure may cause eye and skin redness, difficulty breathing and vomiting. Contact with product at elevated temperatures can result in thermal burns.

Component	Weight%	NTP	ACGIH Carcinogens	IARC
BENZYL ALCOHOL 100-51-6	<10	male rat-no evidence; female rat-no evidence; male mice- no evidence; female mice-no evidence		
STYRENE 100-42-5	<5	male rat-negative; female rat-negative; male mice-equivocal; female mice-negative	A4 - Not Classifiable as a Human Carcinogen	Group 2B; Vol. 60, 1994; Monograph 82, 2002

**Medical Conditions Recognized as Being Aggravated by Exposure:** Preexisting eye, skin and respiratory disorders may be aggravated by overexposure to this product.

### 4. FIRST AID MEASURES

**Ingestion:** Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed. Obtain medical attention.

**Skin Contact:** In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.

#### 4. FIRST AID MEASURES

**Eye Contact:** Flush eyes with clean water for at least 20 minutes while gently holding eyelids open, lifting upper and lower lids.

#### 5. FIRE FIGHTING MEASURES

**Flash Point °F(C°):** >200°F (93.3°C) Estimated  
**Recommended Extinguishing Media:** Carbon Dioxide, Dry Chemicals, Foam.  
**Special Fire-Fighting Procedures:** Firefighters should wear self-contained breathing apparatus and protective clothing to prevent all skin and eye contact. Use water spray to cool exposed containers.  
**Hazardous Products of Combustion:** Acrid and toxic fumes with organic amines, ammonia, oxides of carbon and nitrogen  
**Unusual Fire/Explosion Hazards:** Sudden reaction and fire may result if product is mixed with an oxidizing agent.  
**Lower Explosive Limit:** Not determined  
**Upper Explosive Limit:** Not determined

#### 6. ACCIDENTAL RELEASE MEASURES

**Spill Procedures:** Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal. Prevent from entering waterways or sewers.

#### 7. HANDLING AND STORAGE

**Storage:** Store away from heat. Do not store in reactive metal containers. Keep away from acids and oxidizers.  
**Handling:** Avoid prolonged skin contact. Keep away from eyes. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Wash thoroughly with soap and water after handling. Discard contaminated leather gloves and shoes. Do not mix with sodium nitrite or other nitrosating agents as cancer-causing nitrosamines could be formed.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Eyes:** Safety glasses with side shields or chemical goggles.  
**Skin:** Neoprene or nitrile gloves recommended.  
**Ventilation:** General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.  
**Respiratory Protection:** An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Black paste  
**Odor:** Mercaptan  
**Boiling Point:** >300°F (148.8°C)  
**pH:** Does not apply  
**Solubility in Water:** Slight  
**Specific Gravity:** 1.4  
**VOC(Wt.%):** 10.8%  
**Vapor Pressure:** <5 mm Hg @ 77°F  
**Vapor Density (Air=1):** >1  
**Evaporation Rate:** <1 (butyl acetate = 1)

#### 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable at normal conditions  
**Hazardous Polymerization:** Will not occur.  
**Incompatibilities:** Strong oxidizers, Materials reactive with hydroxyl compounds, Sodium/calcium hypochlorite, Peroxides, Reactive metals (e.g. Na, Ca, zinc), Acids  
**Conditions to Avoid:** Heat, Corrodes base metals  
**Hazardous Products of Combustion:** Acrid and toxic fumes with organic amines, ammonia, oxides of carbon and nitrogen

#### 11. TOXICOLOGICAL INFORMATION

See Section 3

## 12. ECOLOGICAL INFORMATION

No data available

## 13. DISPOSAL CONSIDERATIONS

**Recommended Method of Disposal:** Disposal should be made in accordance with federal, state and local regulations..

**US EPA Waste Number:** NH - Not a RCRA Hazardous Waste Material

## 14. TRANSPORTATION INFORMATION

### DOT (49CFR 172)

#### Ground Transport (DOT)

**DOT Shipping Name:** CONSUMER COMMODITY  
**Hazard Class:** ORM-D  
**UN/ID Number:** None

### IATA

**Proper Shipping Name:** Consumer Commodity (Not more than 1 liter)  
**Class or Division:** Class 9  
**UN/ID Number:** ID 8000

### IMDG

**Proper Shipping:** Amines, liquid, corrosive,n.o.s., (Tris-2,4,6-(Dimethylaminomethyl) Phenol), Limited Quantity  
**Hazard Class:** Class 8 PGIII  
**UN Number:** UN 2735

**Marine Pollutant:** None

## 15. REGULATORY INFORMATION

**SARA 313 Chemicals:** The following component(s) is listed as a SARA Section 313 Toxic Chemical.

STYRENE

### CALIFORNIA PROP 65:

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**TSCA Inventory Status:** All components of this product are listed (or exempt) on the EPA TSCA inventory.

## 16. OTHER INFORMATION

**Estimated NFPA Rating:** HEALTH 3, FLAMMABILITY 1, REACTIVITY 1.

**Estimated HMIS Classification:** HEALTH 3, FLAMMABILITY 1, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn.

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