

**Epoxy Systems, Inc.**  
**Material Safety Data Sheet**  
OSHA's Hazard Communication Standard,  
29 CFR 1910.1200.

**IDENTITY: EPOXY SYSTEMS' PRODUCT #1800 White Brushable Polyurea Coating "A" Component**

**SECTION I**

**Manufacturer:** Epoxy Systems, Inc.  
**Emergency Number:** 1-800-633-8253 PERS  
**Address:** 20774 W. Pennsylvania Ave.  
**Telephone Number:** 352-4891666

**Dunnellon, FL 34431      Date Prepared:      6/2010**

**SECTION II – HAZARDOUS INGREDIENTS**

<u>Hazardous Components</u>	<u>CAS #</u>	<u>OSHA PEL</u>	<u>Hazard Limits</u>	<u>%</u>
Homopolymer Polymer HDI	28182-81-2	N/D	.5% mg/m <sup>3</sup>	
Titanium Dioxide	13 463-67-7		10 mg/ m <sup>3</sup>	

**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**

**Specific Gravity:** 1.27      **Ph (1% solution)** N/D

**Appearance and Odor:** Gray liquid, mild odor      **Volatility:** Low

**Flash Point:** (°f) (CLOSED CUP):>200      **Water Solubility:** Negligible (<1%)

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** (°F)(Method):>200 (CLOSED CUP)

**Ignition Temp:** (°F): N/D

**Flammable Limits:** (%): Lower N/D    Upper N/D

**Products evolved when subjected to heat or combustion:** Isocyanate vapor and mist. Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides and possible traces of Hydrogen Cyanide.

**Recommended Fire Extinguishing Agents and Special Procedures:** Carbon Dioxide, Dry Chemical, or Foam. If Water is used, it should be a very large quantity. The reaction between water and hot Isocyanate may be Vigorous.

**Note: Down- Wind Personnel Must Be Evacuated.** Fire Fighters Must Wear Positive Pressure Self-Contained Breathing Apparatus And Full Protective Clothing.

**Unusual Or Explosive Hazards:** Do Not Reseal Contaminated Containers As Pressure May Build Up And Rupture them.

**SECTION V – REACTIVITY DATA**

**Stability:** Stable Under Recommended Storage Conditions.

**Incompatibility:** Water, Acid, Base (Alkalies, Ammonia), Alcohols, Metal Compounds, Surface Active Material Avoid Water As It Reacts To Form Heat, CO<sub>2</sub> And Insoluble Urea.

**Hazardous Decomposition Products:** Isocyanate Vapor and Mist. Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides And possible Traces Of Hydrogen Cyanide.

**Hazardous Polymerization:** May Occur With Incompatible Reactants (See Above). Especially Strong Bases And Water Or Temperature Over 320°F (160°C). Reaction with Water Is Gentle At Room Temperature Over 120°F (49°C) Accelerates Reaction Rate.

**Conditions To Avoid: Stable Under Recommended Storage Conditions.**

**SECTION VI - HEALTH HAZARD DATA**

**Respiratory Protection:** Wear MSHA/NIOSH Approved (Or Equivalent) Full Face piece Airline Respirator In The Positive Pressure Mode With Emergency Escape Provisions. A Respiratory Protection Program That

Meets OSHA 1910.134 And ANSI Z88.2 Requirements Must Be Followed Whenever Workplace Conditions Warrant A Respirator's Use.

**Eye Protection:** Use Chemical Splash Goggles.

**Skin Protection:** Use Impermeable Gloves To Minimize Skin Contact. Special Precautions Should Be Taken To Ensure That Material Cannot Get Inside Gloves. This Product May Be A Skin Sensitizer. Exposed Users Should Shower And Change To Clean Clothing After The Work Shift. Precautions Should Be Taken To Prevent Re-Exposure Of Sensitized Individuals. Personal Protective Equipment To Prevent Dermal Exposure Is Recommended.

**Other Protective Equipment:** A Safety Shower And Eye Wash Fountain Should Be Readily Available To Identify Additional Personal Protective Equipment (PPE) Requirements, It Is Recommended That A Hazard Assessment In Accordance With The OSHA PPE Standard (29 CFR 1910.132) Be Conducted Before Using This Product.

#### **SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE**

**The Following Personal Protection Is Recommended:**

Safety Glasses; Coveralls:  
Chemical Glasses; Gloves, Chem. Resist:  
Supplied Air Mask: (for large spills or confined areas- unreacted material)

**Eyes:** Irrigate With Water For 15 Minutes Continuously. Consult Medical Personnel

**Skin:** Wash Off With Soap And Water.

**Ingestion:** This Product Has A Low Order Of Acute Oral Toxicity Based On Animal Data. May Be Harmful If Swallowed.

**Ingestion:** Remove To Fresh Air. If Not Breathing, Give Mouth To Mouth Resuscitation. If Breathing Difficult, Give Oxygen. Consult Medical Personnel.

#### **SECTION VIII - CONTROL MEASURES**

<b>Exposure Guidelines(S):</b>	<b>Value</b>	<b>Limit</b>	<b>Reference</b>
HDI polymeric diisocyanate	0.005 ppm	TWA	OSHA / ACGIH

**Ventilation:** General And / Or Local Exhaust To Control To Below The Exposure Guidelines.

**Spill Control And Disposal:** Contain Spill. Avoid Personal Contact. Wipe Up Or Absorb With Suitable Material For Disposal. Dispose Of Unused Material In A Suitable Manner.

**RCRA Waste:** No **RCRA Classification:** N/A

**Storage And Handling:** Store Indoors At 50-96°F In The Original Unopened Containers. Protect From Atmospheric Moisture. Replace Outage With Inert Dry Gas-Nitrogen Or Desiccated Dry Air.

**Other Precautions:** Misuse Of Empty Containers Can Be Hazardous. Empty Containers Can Be Hazardous If Used To Store Toxic, Flammable, Or Reactive Materials. Cutting Or Welding Of Empty Containers Might Cause Fire, Explosion Of Toxic Fumes From Residues. Do Not Pressurize Or Expose To Open Flame Or Heat.

#### **Section IX- ADDITIONAL INFORMATION**

1. Title III Section .311- Hazard Categorization

Acute:  
Chronic:  
Reactive

N/A = Not Applicable

N/D = Not Determined

N/E = Not Established

**Epoxy Systems, Inc.**  
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29 CFR 1910.1200.

**IDENTITY: EPOXY SYSTEMS' PRODUCT #1800 White Brushable Polyurea Coating "B" Component**

**SECTION I**

**Manufacturer:** Epoxy Systems, Inc.

**Emergency Number:** 1-800-633-8253 PERS

**Address:** 20774 W. Pennsylvania Ave. **Telephone Number:** 352-489-1666

Dunnellon, FL 34431

**Date Prepared:**

6/2010

**SECTION II - HAZARDOUS INGREDIENTS**

**Hazardous Components CAS # OSHA PEL Hazard Limits %**

Aspartic Ester

specific chemical identity is withheld as a trade secret ACGIH: N/E

N/E

100%

**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**

**Specific Gravity:** 1.07

**Ph (1% solution)** N/D

**Appearance and Odor:** Amber liquid, mild odor

**Volatility:** Low

**Flash Point:** (°F) (CLOSED CUP):>200

**Water Solubility:** Negligible (<1%)

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** (°F)(Method):>200

**Ignition Temp:** (°F): N/D

**Flammable Limits:** (%): Lower N/D Upper N/D.

**Products Evolved When Subjected To Heat Or Combustion:** Carbon Dioxide, Carbon Monoxide, And Ammonia May Be Formed And Burning In Limited Air Supply.

**Recommended Fire Extinguishing Agents and Special Procedures:** Water, Dry Chemical, Foam Or Carbon Dioxide, Water And Foam May Cause Frothing. Use Water To Cool Fire Exposed Containers.

**Unusual Or Explosive Hazards:** None

**SECTION V - REACTIVITY DATA**

**Stability:** Stable Under Recommended Storage Conditions.

**Conditions To Avoid:** None

**Incompatibility:** Strong oxidizing

**Hazardous Decomposition Products:** Carbon Dioxide, Carbon Monoxide, And Ammonial May Be Formed On Burning In Limited Air Supply.

**Hazardous Polymerization:** Will Not Occur.

**SECTION VI - HEALTH HAZARD DATA**

**Eye Protection:** May Cause Extreme Eye Irritation.

**Skin Contact:** May Be Only Slightly Irritating To Corrosive.

**Skin Absorption:** Expected To Be Somewhat Toxic By Dermal Absorption.

**Ingestion:** Harmful If Swallowed.

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE**

**The Following Personal Protection Is Recommended:**

Safety Glasses: Protective Apron:  
Chemical Glasses: Coveralls:  
Face Shield: Gloves, Chem. Resist:  
Supplied Air Mask: (for large spills or confined areas-unreacted material)

**Eyes:** Flush With Plenty Of Water For 15 Minutes. Consult Medical Personnel.

**Skin:** Wash Off With Soap And Water. Consult Medical Personnel.

**Ingestion:** **DO NOT** Induce Vomiting. Give Large Quantities Of Water. Consult Medical Personnel.

**Inhalation:** Remove To Fresh Air. If Not Breathing, Give Mouth To Mouth Resuscitation. If Breathing Is Difficult, Give Oxygen. Consult Medical Personnel.

## SECTION VIII - CONTROL MEASURES

**Ventilation:** Normal

**Spill Control And Disposal:** Avoid Personal Contact. Wipe Up Or Absorb With Suitable Material For Disposal. Dispose Of As Industrial Local, State And Federal Regulations.

**RCRA Waste:** No

**RCRA Classification:** N/A

**Storage And Handling:** Minimum Storage Temperatures Are Recommended. If Stored Above 100°F, A N2 Atmosphere Is Recommended. Avoid Water Contamination.

**Other Precautions:** Misuse Of Empty Containers Can Be Hazardous. Empty Containers Can Be Hazardous If Used To Store Toxic, Flammable, Or Reactive Materials. Cutting Or Welding Of Empty Containers Might Cause Fire, Explosion Of Toxic Fumes From Residues. Do Not Pressurize Or Expose To Open Flame Or Heat.

## Section IX- ADDITIONAL INFORMATION

1. Title III Section 302/304- Extremely Hazardous Substance  
Component: None
2. CERCLA SEC 1-2 (a)- Hazardous Substance  
Component: None
3. Title III Sec. 311 Hazard Categorization  
immediate health hazard
4. Title III Sec. 313- Toxic Chemicals  
Component: None

N/A = Not Applicable

N/D = Not Determined

N/E = Not Established