

Issue Date 08-Jun-2013

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Version 1

1. PRODUCT AND COMPANY IDENTIFICATION**Product Identifier****Product Name** EMA Epoxy Adhesive Part A**Other Means of Identification****SDS #** PAN-001**Recommended Use of the Chemical and Restrictions on Use****Recommended Use** Epoxy resin.**Details of the Supplier of the Safety Data Sheet****Supplier Address**Panduit
18900 Panduit Dr.
Tinley Park, IL 60487**Emergency Telephone Number****Company Phone Number** Phone: 708-532-1800
Fax: 708-532-1811
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)**2. HAZARDS IDENTIFICATION****Classification**

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Carcinogenicity	Category 2

Signal Word**Warning****Hazard Statements**Causes skin irritation
Causes severe eye irritation
Suspected of causing cancer**Appearance** White paste**Physical State** Paste**Odor** Mild

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Wear eye/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Get medical attention if irritation occurs
 IF ON SKIN: Wash with plenty of soap and water
 If skin irritation occurs: Get medical advice/attention
 Take off contaminated clothing and wash it before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Bisphenol A - Epichlorohydrin polymer	25068-38-6	30-60
Aluminum Hydroxide	21645-51-2	30-60
Titanium Dioxide	13463-67-7	5-10

4. FIRST AID MEASURES

First Aid Measures

General Advice	If exposed or concerned: Get medical advice/attention.
Inhalation	If symptomatic, move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms persist, call a physician.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation occurs.
Ingestion	Do not induce vomiting without medical advice. If symptoms persist, call a physician.
Skin Contact	IF ON SKIN: Wash with plenty of soap and water. If irritation occurs: Get medical advice/attention. Take off contaminated clothing. Wash contaminated clothing before reuse.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms	Causes skin irritation. May cause allergic skin reaction. Skin contact can lead to drying, defatting, itching, stinging and irritation. Causes severe eye irritation. Exposed individuals may experience eye tearing, redness and discomfort. May cause irritation to the mucous membranes and upper respiratory tract.
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Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Dry chemical. Carbon dioxide (CO₂).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Closed containers may explode due to buildup of pressure when exposed to extreme heat.

Hazardous Combustion Products Carbon oxides. Irritating organic fragments.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Immediately contact emergency personnel. Use personal protective equipment as required. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Remove all sources of ignition.

Environmental Precautions See Section 12 for additional ecological information. Keep out of waterways.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. Wash area with soap and water.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands, and any exposed skin thoroughly after handling. Wear eye/face protection. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from incompatible materials, open flames, and high temperatures. Keep/store only in original container.

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aluminum Hydroxide 21645-51-2	TWA: 1 mg/m ³ respirable fraction	-	-
Titanium Dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³

Appropriate Engineering Controls

Engineering Controls Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Chemical resistant, impermeable gloves.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Paste	Odor	Mild
Appearance	White paste	Odor Threshold	Not available
Color	White		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not applicable	
Melting Point/Freezing Point	Not available	
Boiling Point/Boiling Range	> 149 °C / 300.2 °F	
Flash Point	> 93 °C / 199.4 °F	Tag Closed Cup
Evaporation Rate	Not available	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Negligible	
Vapor Density	Not available	
Specific Gravity	1.68	
Water Solubility	Slightly soluble	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not available	
Autoignition Temperature	Not available	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	
VOC Content (%)	0.47%; 7.9 g/l	
VOC Content	0.04% (value for resin and hardener together)	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Contact with incompatible materials. Excessive heat.

Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Carbon oxides. Irritating organic fragments.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation May cause irritation of respiratory tract.

Eye Contact Causes severe eye irritation.

Skin Contact Causes skin irritation.

Ingestion May cause discomfort if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Aluminum Hydroxide 21645-51-2	> 5000 mg/kg (Rat)	-	-
Bisphenol A - Epichlorohydrin polymer 25068-38-6	= 11400 mg/kg (Rat)	-	-
Titanium Dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium Dioxide 13463-67-7		Group 2B		X

Legend

*IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present*

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Persistence and Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

- Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.
- Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA

- UN/ID No** UN3082
- Proper Shipping Name** Environmentally hazardous substances, liquid, n.o.s. (Epoxy Resin)
- Hazard Class** 9
- Packing Group** III

IMDG

- UN/ID No** UN3082
- Proper Shipping Name** Environmentally hazardous substances, liquid, n.o.s. (Epoxy Resin)
- Hazard Class** 9
- Packing Group** III

15. REGULATORY INFORMATION

International Inventories

Not Determined

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Not determined

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Titanium Dioxide - 13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Titanium Dioxide 13463-67-7	X	X	X

16. OTHER INFORMATION

NFPA

Health Hazards

Not determined

Flammability

Not determined

Instability

Not determined

Special Hazards

Not determined

HMIS

Health Hazards

2*

Flammability

1

Physical Hazards

1

Personal Protection

Not determined

Chronic Hazard Star Legend

* = Chronic Health Hazard

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08-Jun-2013

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30-Apr-2013

Revision Note

New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet