# **Safety Data Sheet**

Version 1 Revision Date: 27-Jan-2014 Issue Date: 01-Jan-2005

## 1. IDENTIFICATION

Product Identifier

**Product Name** 

E-R Resin

Other means of identification

PRS-002

**Product Code** 

E-R Resin

Recommended use of the chemical and restrictions on use

Recommended Use

Epoxy resin.

Details of the supplier of the safety data sheet

Manufacturer Address

Prosthetics Research Specialists, Inc.

720 E. Southland Avenue Bushnell, FL USA 33513

**Emergency Telephone Number** 

Company Phone Number

352-793-4477

Emergency Telephone (24 hr)

INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

Appearance Water-white to yellow liquid

Physical State Liquid Semi-solid

Odor Faint epoxy odor

to semi-solid

#### Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Polymer of epichlorohydrin and bisphenol A	25085-99-8	100

PRS-002 - E-R Resin Revision Date: 27-Jan-2014

## 4. FIRST-AID MEASURES

#### **First Aid Measures**

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with plenty of water. Wash contaminated clothing before reuse.

Inhalation Remove to fresh air. Call a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water.

#### Most important symptoms and effects

Symptoms This product may cause transient eye irritation. Can cause allergic response in susceptible

or hypersensitive individuals upon repeated or prolonged exposure.

#### Indication of any immediate medical attention and special treatment needed

Notes to Physician No specific antidote. Treatment of exposure should be directed at the control of symptoms

and the clinical condition of the patient.

## 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam, Carbon dioxide (CO2), Dry chemical.

Unsuitable Extinguishing Media Not determined.

#### Specific Hazards Arising from the Chemical

None known.

Hazardous Combustion Products Carbon exides. Phenolic compounds.

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 pregautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

#### Methods and material for containment and cleaning up

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

Methods for Clean-Up Soak up in adsorbent material such as sand and collect in suitable containers. Residual

resin may be removed using steam or hot soapy water.

Revision Date: 27-Jan-2014 PRS-002 - E-R Resin

# 7. HANDLING AND STORAGE

## Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Avoid breathing vapors of heated material.

# Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials

Bases.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

No exposure limits noted for ingredient(s)

#### Appropriate engineering controls

**Engineering Controls** 

Ventilation systems.

## Individual protection measures, such as personal protective equipment

Eye/Face Protection

Goggles.

Skin and Body Protection

For prolonged or repeated skin contact use suitable protective gloves.

Respiratory Protection

Ensure adequate ventilation, especially in confined areas.

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** 

**Appearance** 

Liquid Semi-solid

Water-white to yellow liquid to

Odor

Faint epoxy odor

Color

Water-white to yellow

Odor Threshold

Not determined

**Property** 

Remarks • Method

Melting Point/Freezing Point

**Boiling Point/Boiling Range** 

Flash Point **Evaporation Rate** 

Flammability (Solid, Gas) Upper Flammability Limits Lower Flammability Limit

Vapor Density Specific Gravity

Vapor Pressure

Water Solubility Solubility in other solvents **Partition Coefficient Auto-ignition Temperature** Decomposition Temperature Kinematic Viscosity

Values Not determined

semi-solid

Not determined Not applicable 252 °C / 485 °F

Not determined Not determined Not applicable Not applicable

Not applicable Not applicable 1,16

Insoluble in water Not determined Not determined Not determined Not determined Not determined

Pensky-Martens Closed Cup (PMCC)

PRS-002 - E-R Resin

Revision Date: 27-Jan-2014

Property Values Remarks • Method

Dynamic Viscosity
Explosive Properties
Oxidizing Properties
Not determined
Not determined

## 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

Masses of more than 1 lb (0.5kg) of product plus an aliphatic amine will cause irreversible polymerization with considerable heat buildup.

#### **Conditions to Avoid**

Avoid prolonged excess heat which may cause product decomposition.

#### **Incompatible Materials**

Bases.

#### **Hazardous Decomposition Products**

Carbon oxides. Phenolics.

## 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Product Information

Avoid contact with eyes.

**Skin Contact** 

Eye Contact

Avoid contact with skin.

Inhalation

Avoid breathing vapors or mists.

Ingestion

Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Polymer of epichlorohydrin and bispheriol A 25085-99-8	>2000 mg/kg (rat)	>2000 mg/kg (rabbit)	

#### 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

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

#### Numerical measures of toxicity

Not determined

PRS-002 - E-R Resin Revision Date: 27-Jan-2014

## 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

#### Persistence/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

DOT Not regulated

IATA Not regulated

IMDG Not regulated

PRS-002 - E-R Resin Revision Date: 27-Jan-2014

## 15. REGULATORY INFORMATION

#### International Inventories

**TSCA** 

Listed

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

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

## SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### US State Regulations

#### U.S. State Right-to-Know Regulations

Not determined

#### 16. OTHER INFORMATION

NEPA

**Health Hazards** 

**Flammability** 

Instability

Special Hazards
Not determined

HMIS

Health Hazards
Not determined

Flammability
Not determined

Physical Hazards
Not determined

Personal Protection
Not determined

issue Date:

01-Jan-2005 27-Jan-2014

Revision Date: Revision Note:

New format

#### <u>Disclaimer</u>

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**