



Safety Data Sheet

RF 2325 Part A

Section 1. Identification

Product Identifier	RF 2325 Part A		
Synonyms	N/A		
Manufacturer Stock Numbers	N/A		
Recommended use	Epoxy Resin		
Uses advised against	Avoid high temperatures, flames and contact with strong oxidizing agents.		
Manufacturer Contact			
Address	Resin Formulators 18027 Bishop Avenue Carson, CA, 90746 USA		
	Phone	Emergency Phone	Fax
	(310) 204-6159	(800) 424-9300 CHEMTREC	(310) 202-7247
	Email	Website	
	sales@evroberts.com	http://www.evroberts.com	

Section 2. Hazards Identification

Classification	EYE DAMAGE/IRRITATION - Category 2B SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (Single Exposure) - Category 3
Signal Word	Warning

Pictogram



Hazard Statements

Causes eye irritation
May cause respiratory irritation
Moderately irritating to skin

Precautionary Statements

Response

Call a poison center/doctor/ ... /if you feel unwell.
If eye irritation persists: 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.
If inhaled: Remove person to fresh air and keep comfortable for breathing.

Prevention

Avoid breathing dust/fume/gas/mist/ vapors/spray.
Use only outdoors or in a well-ventilated area.
Wash ...thoroughly after handling.

Storage

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal

Refer to manufacturer/Supplier for information on recovery/recycling

Ingredients of unknown toxicity

0%

Hazards not Otherwise Classified

Form

Viscous Liquid

OSHA/HCS Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200)

EMERGENCY OVERVIEW

WARNING!
CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. HEATED MATERIAL CAN CAUSE THERMAL BURNS.

Potential Health Effects

Inhalation

Slightly irritating to eyes and respiratory tract.

Ingestion

No hazard in normal industrial use.

Eye

Irritating to eyes. Heated material can cause thermal burns.

Potential Chronic Health Effects

Chronic Health Effects

None known

Carcinogenicity

No known significant effects or critical hazards

Mutagenicity

No known significant effects or critical hazards

Teratogenicity

No known significant effects or critical hazards

Developmental Effects

No known significant effects or critical hazards.

Fertility Effects

No known significant effects or critical hazards.

Target Organs

Review Section 2 and 11 for any additional assessments.

Over-Exposure
Signs/Symptoms

Inhalation:
Adverse symptoms may include the following: respiratory tract irritation, coughing

Ingestion:
No specific data

Skin:
Adverse symptoms may include the following: irritation, redness

Eyes:
Adverse symptoms may include the following: pain or irritation, watering, redness.

Medical conditions aggravated by over-exposure:
Pre-existing skin disorders may be aggravated by over-exposure to this product.

Section 3. Ingredients

CAS	Ingredient Name	Weight %
25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane	>80 %
17557-23-2	Oxirane, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis-	<20 %

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

Eye Contact Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. Flushing within one minute is essential to achieve effectiveness. Obtain medical attention IMMEDIATELY.

Skin Contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Continue to rinse for at least 10 minutes. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse. For hot product, flush contaminated skin with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze. Get medical attention immediately.

Inhalation Move exposed person to fresh air. Keep person warm and at rest. If not breathing, breathing is irregular or respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if adverse health effects persist or are severe.

Ingestion Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effect persists or are severe. Never give anything by

mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of First Aid Personnel

In the event of body contact with molten material, immediately cool with running water. Do not attempt to remove material from skin. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Note to Physician

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media

Flammability of the product:
In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media:
Use an extinguishing agent suitable for the surrounding fire.

Special Exposure Hazards:
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous Combustion Products:
Decomposition products may include the following materials:
Carbon Oxides

Special protective equipment for fire-fighters:
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Unsuitable Extinguishing Media

Unusual Fire and Explosion Hazards:
No unusual fire or explosion hazards are anticipated.

Section 6. Accidental Release Measures

Personal precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when Ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air)

Large Spills

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. For molten material, allow the product to cool and solidify. Vacuum or sweep up material and place in a designated, labelled waste container.

Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small Spills

Stop leak if without risk. Move containers from spill area. For molten material, allow the product to cool and solidify. Vacuum or sweep up material and place in a designated, labeled appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and Storage

Handling

Put on appropriate personal protective equipment (see section 8). Do not eat, drink or smoke when using this product. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Avoid breathing of dust created by cutting, sanding, grinding or machining. Avoid breathing of vapors or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Note: This resin may be handled, shipped and stored at elevated temperatures in bulk.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits

Ingredient Name	ACGIH TLV	OSHA PEL	STEL
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane	N/A	none	N/A
Oxirane, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis-	N/A	none	N/A

Personal Protective Equipment

Goggles, Gloves, Apron, Face Shield, Respirator

Consult local authorities

Consult local authorities for acceptable exposure limits.

Recommended Monitoring Procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering Measures

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene Measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Material of gloves for long term application (Btt>480min): Butyl-rubber. Ethyl vinyl alcohol laminate (EVAL) Nitrile rubber. Neoprene gloves. Polyvinyl chloride (PCV) Gauntlet type Material of gloves for short term/splash application (10min): Butyl-rubber. Ethyl vinyl alcohol laminate (EVAL) Nitrile rubber. Neoprene gloves. Polyvinyl chloride (PCV) Gauntlet type
Eye protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicated this is necessary to avoid exposure to liquid splashed, mist or dusts.
Skin Protection	Personal protective equipment for the body should be selected based on the task being performed and the risk involved and should be approved by a specialist before handling the product.
Environmental Exposure Controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 9. Physical and Chemical Properties
--

Physical State	Viscous Liquid
Color	Clear
Odor	N/A
Odor Threshold	N/A
Solubility	Negligible
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	N/A
Specific Gravity	N/A
Density lbs/Gal	1.17

Pounds per Cubic Foot	N/A
Flash Point	249°C (480°F)
FP Method	N/A
pH	N/A
Melting Point	N/A
Boiling Point	Greater than 260°C (500°F)
Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	N/A
Flammability	N/A
Decomposition Temperature	N/A
Auto-ignition Temperature	N/A
Vapor Pressure	0.03 mbar @ 77°C (171°F)
Vapor Density	N/A

Section 10. Stability and Reactivity

Chemical Stability	Stable under recommended storage temperatures and pressures.
Hazardous Polymerization	Will not occur
Conditions to Avoid	Strong oxidizier.
Materials to Avoid	Reactive or incompatible with the following materials: Oxidizing materials, strong acids, strong alkalis.
Other Hazards	Reacts with considerable heat release with some curing agents.
Hazardous Decomposition Products	Decomposition products may include the following materials: Carbon Oxides

Section 11. Toxicological Information

Acute Toxicity Data	4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer: LD50 Oral - Rat - 30,000 mg/kg LD50 Oral - Mouse - 20,000 mg/kg LD50 Oral - Rabbit - 19.8 mg/kg LD50 Dermal - Rat - >1,200 mg/kg LD50 Dermal - Mouse >1,270 mg/kg
Other Toxicological Information	Carcinogenicity Classification Ingredient Name: 4, 4' - Isopropylidenediphenol-Epichlorohydrin Copolymer ACGIH: Not Classified IARC: Not Classified NTP: Not Listed OSHA: Not Regulated

Section 12. Ecological Information

Environmental effects	No known significant effects or critical hazards.
Other Adverse Effects	No known significant effects or critical hazards.

Section 13. Disposal

Waste disposal The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-product should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

UN Number N/A
UN Proper Shipping Name N/A
DOT Classification N/A
Packing Group N/A
Disclaimer The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

Section 15. Regulatory Information

HCS Classification Irritating material, Sensitizing material
Sara 311/312 Hazards Acute Health Hazard, Chronic Health Hazard
Sara 313 Components This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Sara 302 Components No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
California Prop. 65 Components This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.
Regulatory for Canada WHMIS (Canada)
Class D-2B: Material causing other toxic effects (Toxic)
Canadian Lists: Canadian NPRI: None required.
International Regulations Chemical Inventories:
Europe inventory: All components are listed or exempted.
Australia inventory (AICS): All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Korea inventory (KECI): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
Japan inventory (ENCs): All components are listed or exempted.
Canada inventory: All components are listed or exempted.
United States inventory (TSCA 8b): All components are listed or exempted.

Section 16. Other Information

Revision Date 6/17/2018
HMIS Rating (Not The HMIS Rating for this product is:

Regulated)

Health: 2 Flammability: 1 Reactivity: 0

0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe

Disclaimer

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of E.V. Roberts' product safety program. It is not intended to constitute performance information concerning the product. No warranty, expressed or implied, or merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.

To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency. E.V. Roberts does not undertake to furnish advice on such matters.