



Safety Data Sheet

RF 971

Section 1. Identification

Product Identifier	RF 971		
Synonyms	Polyamide Hardner		
Manufacturer Stock Numbers	11679		
Recommended use	Epoxy Adhesive Hardener		
Uses advised against	Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids. In reactions with many curing agents, considerable heat is released.		
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	ACUTE TOXICITY - INHALATION - Category 5 EYE DAMAGE/IRRITATION - Category 2A SKIN CORROSION/IRRITATION - Category 2
Signal Word	Warning
Pictogram	The pictogram area contains two red diamond-shaped hazard symbols. The first symbol shows a hand being splashed with liquid from a test tube. The second symbol is a large black exclamation mark.
Hazard Statements	Causes serious eye irritation

	May be harmful if inhaled Moderately irritating to skin
Precautionary Statements	
Response	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: Call a POISON CENTER or doctor/... if you feel unwell
Prevention	Wash ...thoroughly after handling. Wear eye protection/face protection.
Storage	Store in a well-ventilated place. Keep cool.
Disposal	Refer to manufacturer/Supplier for information on recovery/recycling

Ingredients of unknown toxicity 0%

Hazards not Otherwise Classified

Warning Causes skin irritation.
Risk of serious damage to eyes.
May cause allergic skin reaction.

Appearance

Odor Amine/Ammoniacal

Color Amber

Routes of Entry Skin Contact, Eye Contact, Inhalation, Ingestion

Potential Health Effects

Inhalation Can cause severe respiratory irritation.

Skin Causes skin irritation. Allergic reactions are possible.

Eye Contact causes severe eye irritation.

Ingestion Considered practically non-toxic.

Chronic Health Effects None known

Section 3. Ingredients

CAS	Ingredient Name	Weight %
68410-23-1	Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	90-95 %

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

Section 4. First-Aid Measures

Inhalation	Move person to fresh air.
Skin	Wash with soap and water. Get medical attention if irritation develops or persists.
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.
Ingestion	Do not induce vomiting. The victim should drink several glasses of water to dilute the ingested substance. If vomiting occurs naturally, keep airway clear. Get medical attention. Never give anything by mouth if the victim is rapidly losing consciousness, or is unconscious or convulsing.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media

Flash Point:
>365 Degrees F
ASTM D 92-97; QP1363.2; Flash and Fire Points by Cleveland Open

Extinguishing media:
Use alcohol-resistant foam, carbon dioxide, dry chemical or water spray when fighting fires involving this material.

Protective Equipment:
Use self-contained breathing apparatus and full protective clothing (Bunker Gear).

Unusual Fire and Explosion Hazards:
Not Applicable

Hazardous Combustion Products:
Thermal decomposition products are hazardous and/or toxic. Carbon dioxide, carbon monoxide, oxides of nitrogen and unknown organics. May evolve hydrogen chloride.

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Unsuitable Extinguishing Media

N/A

Section 6. Accidental Release Measures

Personal precautions

Wear suitable protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing. Evacuate personnel to safe areas.

Environmental Precautions Spill and Leak Procedures

Prevent further leakage or spillage.

Spill response procedures: Caution. Combustible. – Large spills – Eliminate potential sources of ignition. Wear appropriate respirator and other protective clothing. Shut off source of leak only if safe to do so. Dike and contain. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material; place in non-leaking containers and seal tightly for proper disposal. Flush area with water to remove trace residue; dispose of flush solution as above. – Small spills – Take up with an absorbent material and place in non-leaking containers for proper disposal.

Section 7. Handling and Storage

Storage Requirements

Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	N/A	N/A	N/A
Personal Protective Equipment	Goggles, Gloves, Apron, Face Shield, Respirator, CHEMICAL GOGGLES			
Engineering controls	Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.			
Personal Protective Equipment Respiratory Protection	Wear appropriate respirator when ventilation is inadequate. During spraying, wear suitable NIOSH/MSHA approved respirator. Follow manufacture's recommendations.			
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.			
Eye protection	Full face shield with goggles underneath. Chemical resistant goggles must be worn.			

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Amber
Odor	Ammoniacal
Odor Threshold	N/A
Solubility	Moderate - (1 to 10%)
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	N/A
Specific Gravity	1
Density lbs/Gal	0.97
Pounds per Cubic Foot	N/A
Flash Point	> 365°F (>185°C)
FP Method	Flash and Fire Points by Cleveland Open
Ph	N/A
Melting Point	N/A
Boiling Point	N/A
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	N/A
Vapor Density	N/A

Section 10. Stability and Reactivity

Decomposition advices	No decomposition if used according to specifications
Materials to Avoid	Strong acids and strong oxidizers
Polymerization	Polymerization will not occur

Section 11. Toxicological Information

Acute Oral Toxicity	LD50>5000 mg/kg body weight
Acute Dermal Toxicity	LD50>5000 mg/kg body weight
Skin Irritation	Slightly irritating
Eye Contact	Severely irritating

Section 12. Ecological Information

Ecological Information	No data available.
Other Adverse Effects	No known significant effects or critical hazards

Section 13. Disposal

Disclaimer Part 1	The generation of waste should be avoided or minimized wherever possible.
Disclaimer Part 2	Disposal should be in accordance with local, state, provincial and national regulations. This material is not a hazardous waste under RCRA 40 CFR 261. Small quantities should be treated with a liquid decontaminate. The treated waste is not a hazardous material under RCRA 40 CFR 261. Chemical waste, even small quantities, should never be poured down drains, sewers or waterways.
Disclaimer Part 3	Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

Section 14. Transport Information

UN Number	3082
UN Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s. (dimer fatty acid(C18) poly amido amine resin
DOT Classification	9
Packing Group	III
Disclaimer	The transport information provided represents the regulatory transport classification of the product without consideration to packaging, quantity, or modal restrictions and exceptions. It is the user's responsibility to determine the appropriate packaging and modal requirements and/or limitations for the product quantity being shipped.

Section 15. Regulatory Information

TSCA Inventory Status	This product and/or all of its components are either included on or exempt from the TSCA Inventory of Chemical Substances
SARA 311/312 Hazard Categories	Immediate Health
TSCA 12(b) Components	None
SARA 313 Toxic Chemicals	None
SARA 302 Extremely Hazardous Substances	None
CERCLA Hazardous Chemicals	None
California Proposition 65	No California Proposition 65 listed chemicals are known to be present.

Section 16. Other Information

Revision Date

5/14/2015

HMIS Rating (Not Regulated) The HMIS Rating for this product is:
Health: 3 Flammability: 1 Reactivity: 0

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

For Information Purposes Only - No Longer Regulated

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