



Safety Data Sheet

RF 68

Section 1. Identification

Product Identifier RF 68
Synonyms N/A
Manufacturer Stock
Numbers 10161

Recommended use Epoxy Adhesive Hardener
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
(310) 204-6159

Emergency Phone
(800) 424-9300
CHEMTREC

Fax
(310) 202-7247

Email
sales@evroberts.com

Website
<http://www.evroberts.com>

Section 2. Hazards Identification

Classification ACUTE TOXICITY - DERMAL - Category 4
 ACUTE TOXICITY - INHALATION - Category 4
 ACUTE TOXICITY - ORAL - Category 4
 EYE DAMAGE/IRRITATION - Category 2B

Signal Word Warning

Pictogram



Hazard Statements Causes eye irritation

	Harmful if inhaled Harmful if swallowed Harmful in contact with 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. If on skin: Wash with plenty of water/ ... If swallowed: Call a poison center/doctor/ ... / if you feel unwell. Rinse mouth. Specific treatment (see ... on this label) Take off immediately all contaminated clothing and wash it before reuse.
Prevention	Avoid breathing dust/fume/gas/mist/ vapors/spray. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wash ...thoroughly after handling. Wear protective Butyl Gloves, Face Shield, Eye Bath and Safety Shower.
Storage	N/A
Disposal	Refer to manufacturer/Supplier for information on recovery/recycling
Ingredients of unknown toxicity	0%
Hazards not Otherwise Classified	
Over-exposure signs/symptoms	
Inhalation	CAUTION! May cause irritation to upper respiratory tract. Avoid prolonged or repeated inhalation.
Eye	Contact with eyes may cause irritation or burning sensation.
Skin	Can cause severe irritation or burns. Absorbed through skin; Prolonged or repeated exposure may result in the absorption of harmful amounts of material, resulting to allergenic effects such as rashes, itching, hives, or even open sores.
Ingestion	DANGER! Do not take internally. May cause gastrointestinal irritation or ulceration. May cause burns of mouth and throat.
OTHER:	Polyethylene amines are suspected mutagens. No effects of chronic exposure or target organ effects are known. No exposure limits have been established for this product as formulated.
Potential Health Effects	----- Health Effects or Risks from Exposure. Acute: See section 5.
Chronic Hazards	Chronic Hazards: Possible sensitization resulting in skin irritation, hives and even open sores. The effect on the individual may become more serious with repeated exposure. The effect of sensitization depends on the individual, where a safe exposure for one person may cause an allergic reaction to a person who is or has become sensitive.

Section 3. Ingredients

CAS	Ingredient Name	Weight %
112-57-2	1,2-Ethanediamine, N-(2-aminoethyl)-N'-[2-[(2-aminoethyl)amino]ethyl]-	10 %
68991-84-4	Fatty acids, vegetable-oil, reaction products with tetraethylenepentamine	90 %

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 15 minutes. Hold eyelids open during flushing. If irritation persists repeat flushing and obtain medical attention IMMEDIATELY.
Skin Contact	Remove contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice. Contaminated clothing should be thoroughly cleaned before reuse. Contaminated leather articles can not be decontaminated and should be destroyed.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
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.
Animal Testing	Test Type: Oral Tox 7.6 Result: G/KG LD50 Species: Rat Hazard Description: Slight Test Type: Dermal Tox Result: >6.8 G/KG LD 50 Species: Rabbit Hazard Description: Relatively Harmless Test Type: Skin Ir. Result: 2.4 0-8 Range Species: Rabbit Hazard Description: Moderate Test Type: Eye Ir. Result: 98.8 0-110 Range Species: Rabbit Hazard Description: Severe
Medical Conditions Aggravated by Exposure	Because of the presence of triethylenetetramine, existing allergenic skin problems or respiratory problems such as asthma could be aggravated.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media

Flash Point:
>230°F Cleveland Open Cup

Auto Ignition Temperature:
Not Available

Flammable Limits (Lower):
Not Available

Flammable Limits (Upper):
Not Available

Extinguishing media:
Use alcohol 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).

Unsuitable Extinguishing Media

Unusual Fire and Explosion Hazards:
May produce hazardous fumes or hazardous decomposition products.

Section 6. Accidental Release Measures

No Data Available

Section 7. Handling and Storage

No Data Available

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	1,2-Ethanediamine, N-(2-aminoethyl)-N'-[2-[(2-aminoethyl)amino]ethyl]-	N/A	N/A	N/A
	Fatty acids, vegetable-oil, reaction products with tetraethylenepentamine	N/A	N/A	N/A
Personal Protective Equipment Engineering Controls	Goggles, Gloves, Face Shield, Respirator, PROTECTIVE CLOTHING, SAFETY GLASSES Use local exhaust ventilation to maintain airborne concentrations below the TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it. Follow guidelines in the ACGIH publication "Industrial Ventilation".			
Respiratory Protection	Wear appropriate respirator when ventilation is inadequate. During spraying, wear suitable NIOSH/MSHA approved respirator. Follow manufacture's recommendations.			
Eye Protection Hand protection	Monogoggles. Neoprene gloves. Butyl-rubber. Nitrile rubber. Impervious gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.			

Section 9. Physical and Chemical Properties

Physical State	paste
Color	Tan
Odor	mild ammoniacal
Odor Threshold	N/A
Solubility	Moderate
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	N/A
Specific Gravity	0.97
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	>230°F
FP Method	Cleveland Open Cup
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

Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Exposure to temperatures of around 300°C and above.
Incompatibilities	Keep away from strong oxidizing agents, strong Lewis or mineral acids.
Hazardous Decomposition Products	Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide, nitrogen oxides and ammonia.
Hazardous Polymerization	Will not occur

Section 11. Toxicological Information

No Data Available

Section 12. Ecological Information

No Data Available

Section 13. Disposal

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.
Small Spills	Small spills should be flushed with dilute (5%) acetic acid for sewer disposal.
Large Spills	Transfer to a labeled, sealable container for product recovery or safe disposal.
Note	This material as shipped is not a hazardous waste as specified in 40 CFR 261.
Waste Disposal Methods	Waste material may be incinerated at proper facilities or disposed of under Local, State, and Federal Regulations controlling environmental protection.

Section 14. Transport Information

UN Number	N/A
UN Proper Shipping Name	N/A
DOT Classification	N/A
Packing Group	N/A

Section 15. Regulatory Information

No Data Available

Section 16. Other Information

Revision Date	7/22/2015
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