




Safety Data Sheet

RF 2015 Black Part A

Section 1. Identification

Product Identifier	RF 2015 Black Part A		
Synonyms	Epoxy Resin System		
Manufacturer Stock Numbers	28275		
Recommended use	Filled Epoxy Resin System		
Uses advised against	Avoid strong acids, bases, oxidizing agents, water and metals. Avoid high temperatures. Avoid flames.		
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 - ORAL - Category 5 EYE DAMAGE/IRRITATION - Category 2A SKIN CORROSION/IRRITATION - Category 2
Signal Word	Warning
Pictogram	
Hazard Statements	Causes serious eye irritation

	May be harmful if swallowed 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.
Prevention	Wash ...thoroughly after handling. Wear eye protection/face protection.
Storage	N/A
Disposal	N/A
Ingredients of unknown toxicity	0%
Hazards not Otherwise Classified	
Emergency Overview	Warning: Cause severe skin irritation. Causes eye irritation. May cause skin burns and allergic skin reaction.
Routes of Exposure	Inhalation; Dermal; Eyes
Chronic	Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis) and cancer.

Section 3. Ingredients

CAS	Ingredient Name	Weight %
17557-23-2	Oxirane, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis-	<5 %
25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane	>45 %
8021-99-6	Charcoal, bone	~2 %
67924-34-9	Phenol, 4-(1,1-dimethylethyl)-, polymer with (chloromethyl)oxirane and 4,4'-(1-m	Unknown
14808-60-7	Quartz (SiO2)	Unknown

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

Section 4. First-Aid Measures

Ingestion	Do NOT induce vomiting. Provided the patient is conscious, wash their mouth with water then give 1 or 2 glasses of water to drink. Refer person to medical personnel for immediate attention.
Skin	Immediately wash skin with plenty of soap and water while removing contaminated clothing and shoes. GET MEDICAL ATTENTION. Contaminated clothing should be discarded in a manner which limits further exposure.
Inhalation	Remove person to fresh air. If rapid recovery does not occur, obtain medical attention.
Eye	Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.
Overexposure Effects Medical Conditions Aggravated by Exposure Additional Information	Can cause skin irritation, eye irritation, and allergic skin reaction. Skin and eye conditions. Referral to a physician is recommended if there is any question about the seriousness of any injury.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Flash Point: >200°F (93°C) (estimated) Flammable Limits (Lower): Not Available Flammable Limits (Upper): Not Available Extinguishing Media: Carbon dioxide, dry chemical, foam or water fog. Protective Equipment: Use self-contained breathing apparatus and full protective clothing (Bunker Gear). Fire and Explosion Hazards: Decomposition and combustion products may be toxic.
Unsuitable Extinguishing Media	N/A

Section 6. Accidental Release Measures

Major Spills Accidental Release Measures	For Major Spills, call CHEMTREC at 1-800-424-9300 Avoid all personal contact. Take up with absorbent material. Shovel into closable containers. Flush contaminated area with water.
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Section 7. Handling and Storage

Signal Word	Danger!
Precautions	Causes severe skin irritation and may cause skin burns. Can cause eye irritation and allergic skin reaction. Do not get on skin or on clothing. Avoid contact with eyes. Wash thoroughly after handling. Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury.
Other Handling Information	Crystalline silica may be generated when machining cured products. Overexposure may create possible cancer and silicosis hazard.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Oxirane, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis (oxymethylene)]bis-	N/A	none	N/A
	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane	N/A	none	N/A
	Charcoal, bone	N/A	N/A	N/A
	Phenol, 4-(1,1-dimethylethyl)-, polymer with (chloromethyl)oxirane and 4,4'-(1-m	N/A	N/A	N/A
	Quartz (SiO ₂)	N/A	N/A	N/A
Personal Protective Equipment	Goggles, Gloves, Respirator, CHEMICAL GOGGLES, PROTECTIVE CLOTHING, VENTILATION			
Skin Protection	Wear impervious gloves for prolonged contact. Wear chemical resistant protective clothing.			
Respiratory Protection	In accord with 29 CFR 1910.134 use either a full-face, atmosphere-supplying respirator or air-purifying respirator for organic vapors.			
Eye protection	Chemical resistant goggles must be worn.			
Engineering Controls	Good general mechanical ventilation and local exhaust.			

Section 9. Physical and Chemical Properties

Physical State	Paste
Color	Black
Odor	Slight
Odor Threshold	N/A
Solubility	Insoluble
Partition coefficient Water/n-octanol	N/A
VOC%	0
Viscosity	N/A
Specific Gravity	1.43
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	>200°F (>93° C)
FP Method	Estimated
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

Hazardous Polymerization	Will not occur
Special Sensitivity	Avoid excessive heat
Chemical Stability	Stable under normal conditions.
Incompatibilities	Oxidizing agents, acids, water and base
Hazardous Decomposition Products	Carbon Monoxide, Carbon Dioxide, unknown hydrocarbons.

Section 11. Toxicological Information

Sensitization	Possible in susceptible individuals.
Carcinogenicity	Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury.
Skin Irritation	Severe skin irritant
Eye Irritation	Irritant

Section 12. Ecological Information

No Data Available

Section 13. Disposal

Waste Disposal Method Waste must be disposed of in accordance with federal, state and local environmental control regulations. Incineration is the preferred method.

Section 14. Transport Information

UN Number N/A

UN Proper Shipping Name N/A

DOT Classification N/A

Packing Group N/A

All Regulatory Classification This product is not regulated by CFR, TDG, IMO, IMDG or IATA

Section 15. Regulatory Information

Federal Regulations

OSHA Status

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200)

RCRA

Resource Conservation and Recovery act (RCRA):
Not a hazardous waste under RCRA (40 CFR 26)

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.

Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 12(b) Export Notification: This product contains the following chemical(s) that are subject to a Section 12(b) export notification:

Chemical Name: Oxirane, 2,2'-[(1-methylethylidene) bis(4,1-phenyleneoxymethylene)]bis-
Common Name Diglycidyl Ether of Bisphenol A
CAS Number: 1675-54-3

State Regulations

California Prop. 65 Components

This product contains chemicals known to the State of California to cause cancer, birth defects, and/or reproductive harm.

Chemical Name: Quartz (SiO₂)

CASRN: 14808-60-7

Percent in Composition: 0.447% by wt

Comment: Warning! This chemical is known to the State of California to cause Cancer.

Chemical Name: Arsenic

CAS No: 7440-38-2

Percent in Composition: 0% by wt

Comment: Warning! This chemical is known to the State of California to cause Cancer.

Chemical Name: Lead

CAS No: 7439-92-1

Percent in Composition: 0% by wt

Comment: Warning! This chemical is known to the State of California to cause Cancer.

Pennsylvania Right-to-Know: The following is required composition information:

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane

Common Name: Bisphenol A Diglycidyl Ether Polymer

CAS No: 25068-38-6

Comment: Not on Pennsylvania Hazardous Substance List.

Chemical Name: Carbonic acid calcium salt (1:1)

Common Name: Calcium Carbonate

CAS No: 471-34-1

Comment: Not on Pennsylvania Hazardous Substance List.

Chemical Name: Talc

Common Name: Talc
CAS No: 14807-96-6
Comment: Hazardous Substance.

Chemical Name: Oxirane, 2,2'-[1,4-butanediylbis(oxyethylene)]bis-
Common Name: Butanediol Diglycidyl Ether
CAS No: 2425-79-8
Comment: Not on Pennsylvania Hazardous Substance List.

Chemical Name: Siloxanes and silicones, di-me, reaction products with silica
Common Name: Amorphous Hydrophobic Fumed Silica
CAS No: 67762-90-7
Comment: Not on Pennsylvania Hazardous Substance List.

Chemical Name: Phenol, 4,-(1,1-dimethylethyl)-, polymer with (chloromethyl)
oxirane and 4,4'-(1-methylethylidene)bis[phenol]
Common Name: Bisphenol A Epoxy Resin
CAS No: 67924-34-9
Comment: Not on Pennsylvania Hazardous Substance List.

Section 16. Other Information

Revision Date 10/15/2015

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

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.



Safety Data Sheet

RF 2015 Black Part B

Section 1. Identification

Product Identifier RF 2015 Black Part B
Synonyms N/A
Manufacturer Stock Numbers 28275

Recommended use Amine epoxy curing agent
Uses advised against Avoid high temperatures. Avoid flames. Avoid strong acids, bases, oxidizing agents, water and metals.

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 N/A
Signal Word Danger
Pictogram



Hazard Statements N/A
Precautionary Statements

Response	N/A
Prevention	N/A
Storage	N/A
Disposal	N/A
Ingredients of unknown toxicity	0%
Hazards not Otherwise Classified	
Emergency Overview	Corrosive. Causes skin and eye burns. Causes respiratory irritation. May cause allergic skin and respiratory reaction. Harmful if absorbed through skin.
Routes of Entry	Dermal; heated product may produce inhalable vapors.
Acute Exposure	Corrosive. Causes skin and eye burns.
Chronic Exposure	Overexposure may cause damage to blood, kidney, liver, skin, and urinary bladder.
MSDS	Read the entire MSDS for a more thorough evaluation of the hazards.

Section 3. Ingredients

CAS	Ingredient Name	Weight %
111-40-0	1,2-Ethanediamine, N-(2-aminoethyl)-	Unknown
140-31-8	1-Piperazineethanamine	Unknown
68683-29-4	2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-pi	Unknown
80-05-7	Phenol, 4,4'-(1-methylethylidene)bis-	Unknown
90-72-2	Phenol, 2,4,6-tris[(dimethylamino)methyl]-	Unknown
31326-29-1	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethaned	Unknown
35860-37-8	Naphthalene, tris(1-methylethyl)-	Unknown
38640-62-9	Naphthalene, bis(1-methylethyl)-	Unknown
68605-86-7	Fatty acids, tall-oil, polymers with linoleic acid dimers and tetraethylenepenta	Unknown

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

Section 4. First-Aid Measures

Ingestion	Do NOT induce vomiting. Provided the patient is conscious, wash their mouth with water then give 1 or 2 glasses of water to drink. Refer person to medical personnel for immediate attention.
Skin	Immediately wash skin with plenty of soap and water while removing contaminated clothing and shoes. GET MEDICAL ATTENTION. Contaminated clothing should be discarded in a manner which limits further exposure.
Inhalation	Remove person to fresh air. If signs/symptoms develop, get medical attention.
Eye	Immediately flush eyes with plenty of water for 15 minutes. If irritation persists, continue flushing and obtain medical attention immediately
Overexposure Effects	Corrosive – cause skin and eye burns. Causes respiratory irritation. Harmful if absorbed through skin. May cause allergic skin and respiratory reaction.
Medical Conditions Aggravated by Exposure	Skin, eye and pulmonary conditions.
Additional Information	Referral to a physician is recommended if there is any question about the seriousness of any injury.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Flash Point: >200°F (93°C) (estimated) Flammable Limits (Lower): Not Available Flammable Limits (Upper): Not Available Extinguishing Media: Carbon dioxide, dry chemical, foam or water fog. Protective Equipment: Use self-contained breathing apparatus and full protective clothing (Bunker Gear). Fire and Explosion Hazards: Decomposition and combustion products may be toxic.
Unsuitable Extinguishing Media	N/A

Section 6. Accidental Release Measures

Accidental Release Measures	Avoid all personal contact. Take up with absorbent material. Shovel into closable containers. Flush contaminated area with water.
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Section 7. Handling and Storage

Signal Word

Danger!

Precautions

Corrosive – cause skin and eye burns. Causes irritation if inhaled and can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or mist. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling. Notice! Overexposure may have effects on blood, kidney, liver, skin, and urinary bladder.

Other Handling Information

Nuisance dust may be generated when sanding or sawing cured material.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits

Ingredient Name	ACGIH TLV	OSHA PEL	STEL
1,2-Ethanediamine, N-(2-aminoethyl)-	1ppm, 4mg/m3 Time Weighted Average (TWA)	N/A	N/A
1-Piperazineethanamine	N/A	N/A	N/A
2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-pi	N/A	N/A	N/A
Phenol, 4,4'-(1-methylethylidene)bis-	N/A	N/A	N/A
Phenol, 2,4,6-tris[(dimethylamino)methyl]-	N/A	N/A	N/A
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethaned	N/A	N/A	N/A
Naphthalene, tris(1-methylethyl)-	N/A	N/A	N/A
Naphthalene, bis(1-methylethyl)-	N/A	N/A	N/A
Fatty acids, tall-oil, polymers with linoleic acid dimers and tetraethylenepenta	N/A	N/A	N/A

Personal Protective Equipment

Goggles, Gloves, Respirator, CHEMICAL GOGGLES, VENTILATION

Skin Protection

Wear impervious gloves for prolonged contact. Wear chemical resistant protective clothing.

Respiratory Protection

In accord with 29 CFR 1910.134 use either a full-face, atmosphere-supplying respirator or air-purifying respirator for organic vapors.

Eye protection

Safety glasses or goggles required.

Engineering Controls

Good general mechanical ventilation and local exhaust.

Section 9. Physical and Chemical Properties

Physical State	Thixotropic Paste
Color	Caramel / amber liquid
Odor	Ammoniacal
Odor Threshold	N/A
Solubility	N/A
Partition coefficient Water/n-octanol	N/A
VOC%	87.849
Viscosity	N/A
Specific Gravity	1.381
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	>200°F (>93° C)
FP Method	N/A
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

Conditions to Avoid	HEAT Avoid strong oxidizing agents, strong acids, strong bases. Avoid curing large quantities of material to prevent a premature reaction (exotherm) with production of intense heat and smoke, Amines.
Chemical Stability	Stable under normal conditions.
Incompatibilities	Oxidizing agents, acids, water and base
Hazardous Decomposition Products	Carbon Monoxide, Carbon Dioxide, unknown hydrocarbons.
Hazardous Polymerization	Will not occur

Section 11. Toxicological Information

Sensitization	Causes allergic skin and respiratory sensitivity in some people.
Skin Contact	Corrosive. Causes burns. Harmful in contact with skin.
Eye Contact	Corrosive. Causes burns.

Section 12. Ecological Information

No Data Available

Section 13. Disposal

Waste Disposal Method Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

Section 14. Transport Information

UN Number	2735
UN Proper Shipping Name	POLYAMINES, LIQUID, CORROSIVE, N.O.S. Diethylene triamine, N-aminoethyl piperazine
DOT Classification	8
Packing Group	PG II

Section 15. Regulatory Information

U.S. Federal Regulations

OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)

This Safety Data Sheet (SDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA):

This product is not a hazardous waste under RCRA (40 CFR 261).

SARA TITLE III: Section 313 Toxic Chemical List (TCL): This product contain a toxic chemical(s) for routine annual Toxic Chemical Release Reporting under Sec. 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this material.

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-

Common Name: Bisphenol A

Percent in Composition: 1.2574% by wt

Comment:

TSCA SECTION 8 (b): - Inventory Status:

All chemical(s) comprising this product are listed on the TSCA inventory.

TSCA SECTION 12 (b) - Expert Notification:

This product contain the following chemical(s) that are subject to Section 12(b) export notification.

Chemical Name: 1,2-Ethanediamine, N-(2-aminoethyl)-

Common Name: Diethylenetriamine

CAS No.: 111-40-0

State Regulations

California Proposition 65:

The following is required composition information. This product contains the following chemical(s) which are currently listed on the California list of Known Carcinogens and Reproductive Toxins.

Chemical Name: Benzene, methyl-

Common Name: Toluene

CAS No.: 108-88-3

Percent in Composition: 0% by wt

Comment: Warning! This chemical is known to the State of California to cause birth defects or other reproductive harm.

Pennsylvania Right-to-Know: The following is required composition information:

Chemical Name: Sulfuric acid, barium salt (1:1)

Common Name: Barium Sulfate

CAS No.: 7727-43-7

Comment: Hazardous Substance

Chemical Name: Pentanoic Acid, 4,4'-Azobis(4-Cyano-, polymer with 1,3-Butadiene, 1-Piperazine Ethanamine and 2-Propenenitrile)

Common Name: Synthetic Rubber

CAS No.: 68683-29-4

Comment: No on Pennsylvania Hazardous Substance List

Chemical Name: Naphthalene, bis(1-methylethyl)-

Common Name: Diisopropylnaphthalene

CAS No.: 38640-62-9

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Fatty acids, tall-oil, polymers with linoleic acid dimers and tetraethyleneper

Common Name: Amine adduct

CAS No.: 68605-86-7

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1,2-Ethanediamine, N-(2-aminoethyl)-

Common Name: Diethylenetriamine

CAS No.: 111-40-0

Comment: Hazardous Substance

Chemical Name: TRIISOPROPYLNAPHTHALENE

Common Name:

CAS No.: 35860-37-8

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1-Piperazineethanamine

Common Name: Aminoethylpiperazine

CAS No.: 140-31-8

Comment: Hazardous Substance

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-

Common Name: Bisphenol A

CAS No.: 80-05-7

Comment: Environmental Hazardous Substance

Section 16. Other Information

Revision Date

10/15/2015

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

Disclaimer

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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.