



# Safety Data Sheet

## RF 136 Blue Paste

### Section 1. Identification

Product Identifier      RF 136 Blue Paste  
Synonyms                N/A  
Manufacturer Stock  
Numbers                N/A

Recommended use      Epoxy Resin  
Uses advised against   N/A

#### 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            EYE DAMAGE/IRRITATION - Category 2B  
SENSITIZATION - SKIN - Category 1A  
SKIN CORROSION/IRRITATION - Category 3

Signal Word              Warning

Pictogram



Hazard Statements	Causes mild skin irritation May cause an allergic skin reaction Moderately irritating to eyes
Precautionary Statements	
Response	If on skin: Wash with plenty of soap and water for 15 minutes. If skin irritation persists, contact your doctor. If skin irritation occurs: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. 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. Wash contaminated clothing before reuse.
Prevention	Avoid breathing dust/fume/gas/mist/ vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.
Storage	Ideal Storage Temperature is 16-38 Degrees C (60-100 Degrees F)
Disposal	Dispose of contents/container in accordance with local, federal and state regulations. Clean up should be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection. Evacuate the area. Prevent further leakage, spillage or entry into drains. Contain and absorb large spillages onto an inert, non-flammable absorbent carrier (such as earth or sand), Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spillage area clean with liquid decontaminant. Remove and dispose of residues. Notify applicable government authorities if release is reportable. Small spills: Neutralize small spills with decontaminant. Remove and dispose of residues. Notify applicable government authorities if release is reportable..
General	Reacts with strong oxidizing agents, amines, acids (Lewis of mineral). Will exotherm when reacting. This reaction accelerates at higher temperatures
Ingredients of unknown toxicity	0%
Hazards not Otherwise Classified	
Skin	Substance does not generally irritate and is only mildly irritating to the skin. Prolonged contact with this product can cause reddening, swelling, rash, scaling, or blistering. In those who have developed skin sensitization, these symptoms can develop as a result of contact with a very small amount of the liquid material.
Eye	Moderately irritating to the eyes.

### Section 3. Ingredients

CAS	Ingredient Name	Weight %
13463-67-7	Titanium oxide (TiO <sub>2</sub> )	50 %
25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane	>45 %

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

This Product contains one or more ingredients where the specific chemical identity and exact percentage of composition has been withheld as a trade secret

## Section 4. First-Aid Measures

General	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Inhalation	Remove patient from exposure, keep warm and at rest Obtain medical attention. Treatment is symptomatic for primary irritation or bronchospasm If breathing is labored, qualified personnel should administer oxygen. Apply artificial respiration if breathing has ceased or shows signs of failing.
Skin	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.
Eye	Immediately flush eyes with plenty of water for 15 minutes. If irritation persists, continue flushing and obtain medical attention immediately Hold eyelids open during flushing
Ingestion	Do NOT Induce Vomiting. In general, no treatment is necessary unless large quantities of product are ingested. However, if conscience, wash out their mouth with water then give 1 or 2 glasses of water to drink. Refer person to medical personnel for immediate attention.
Note to Physician	In general, emesis induction is unnecessary in high viscosity, low volatility products, e.g. Neat Epoxy Resins. However, symptomatic and supportive therapy may be needed following severe exposure. In such cases, medical follow-up should be maintained for at least 48 hours.

## Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Extinguishing media: Carbon dioxide, dry chemical or appropriate foam. If water is used, very large quantities are required. Reaction between water and hot isocyanate may be vigorous. Contain runoff water with temporary barriers.
Unsuitable Extinguishing Media	Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids. Will exotherm when reacting. This reaction accelerates at higher temperatures
Fire and Explosion Hazards	Fire and Explosion Hazards: Containers may burst under intense heat due to reaction with water, a hazardous build-up of pressure could result if contaminated containers are re-sealed.
Protective Equipment	Protective Equipment: Use self-contained breathing apparatus and full protective clothing (Bunker Gear).
Flash Point	Flash Point: >200°F (93°C) (setaflash)

Flammable Limits (Lower)	Flammable Limits (Lower): Not Available
Flammable Limits (Upper)	Flammable Limits (Upper): Not Available
Auto Ignition Temperature	Auto Ignition Temperature: Not Available
Decomposition Temperature	Decomposition Temperature: ~600 Degrees F (315 Degrees C)
Rate of Burning	Rate of Burning: Not Available
Explosive Power	Explosive Power: None
Sensitivity to Mechanical Impact	Sensitivity to Mechanical Impact: None
Sensitivity to Static Discharge	Sensitivity to Static Discharge: None
Decomposition Products	Decomposition Products: Carbon monoxide, Aldehydes, Acids and other organic substances may be formed during the combustion or thermal or oxidative decomposition. Reaction with some curing agents may produce considerable heat (exotherm), Run-a-way cure reaction may char and decompose the resin system, generating unidentified fumes and vapors, which may be toxic.

## Section 6. Accidental Release Measures

Major Spills	For Major Spills, call CHEMTREC at 1-800-424-9300
Spills, Leaks or Releases	Clean up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection. Evacuate the area. Prevent further leakage, spillage or entry into drains. Contain and absorb large spillages onto an inert, non-flammable absorbent carrier (such as earth or sand), Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spillage area clean with liquid decontaminant. Remove and dispose of residues. Notify applicable government authorities if release is reportable. Small spills: Take up with an absorbent material and dispose of properly.

## Section 7. Handling and Storage

Special Precautions	Emptied containers can contain hazardous product residues. Handle in accordance with the hazard potential of curing agent(s) used. Avoid contact with eyes, avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Launder contaminated clothing before reuse. Contaminated leather articles, including shoes, can not be decontaminated and should be destroyed.
Special Precautions Part 2	Warning: may cause skin and eye irritation. May cause skin sensitization. Minimize bodily contact. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Heating this material above 300 Degrees F in the presence of air may cause slow oxidative decomposition. Above 500 Degrees F, polymerization may occur. Some curing agents, eg. Aliphatic amines can produce exothermic reactions which in large

masses can cause runaway polymerization and charring of the reactants. Fumes and vapors from these thermal and chemical decompositions vary widely in composition and toxicity. DO NOT BREATHE FUMES. Use a NIOSH-approved respirator.

Handling	Avoid personal contact with the product or reaction mixture. Use only with adequate ventilation to ensure that the defined occupational exposure limit is not exceeded. The efficiency of the ventilation must be monitored regularly because of the possibility of blockage. Avoid breathing aerosols, mists and vapors. When the product is sprayed or heated, an approved MSHA/NIOSH positive-pressure, supplied-air respirator may be required.
Storage Requirements	Keep containers properly sealed and when stored indoors, in a well ventilated area. Keep contents away from open flames and high temperatures.
Storage Temperature	Ideal storage temperature is 60-100 Degrees F (16-38 Degrees C)
Shelf Life	12 Months @ 77°F (25°C)

## Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Titanium oxide (TiO <sub>2</sub> )	N/A	N/A	N/A
	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, PROTECTIVE CLOTHING, RUBBER BOOTS, VENTILATION, CHEMICAL GOGGLES			
Preventive Measures	Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.			
Engineering Controls	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".			
Eye Protection	Chemical safety goggles. If there is a potential for splashing, use a full-face shield.			
Skin Protection	The following protective materials are recommended. Gloves - neoprene, nitrile-butadiene rubber, butyl rubber. Thin disposable gloves should be avoided for repeated or long term use. Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH.			
Respiratory Protection	Not ordinarily required			
PROTECTIVE CLOTHING	Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH.			
RUBBER_BOOTS	Please wear rubber boots at all times			
GLOVES	Neoprene, Nitrile-Butadiene rubber, butyl rubber. Thin disposable gloves should be avoided for repeated or long term use.			
VENTILATION	Have proper ventilation			

## Section 9. Physical and Chemical Properties

Physical State	Resinous Liquid
Color	Blue
Odor	Sweet Odor
Odor Threshold	N/A
Solubility	Negligible
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	SemiThixotropic to Thixotropic
Specific Gravity	1.7
Density lbs/Gal	11
Pounds per Cubic Foot	N/A
Flash Point	>200°F (93°C)
FP Method	setaflash
pH	N/A
Melting Point	Below 77°F (25°C)
Boiling Point	>300°F
Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	N/A
Flammability	1
Decomposition Temperature	~600°F (315°C)
Auto-ignition Temperature	N/A
Vapor Pressure	<1
Vapor Density	N/A

Preventive Measures	Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.
Engineering Controls	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".
Eye Protection	Chemical safety goggles. If there is a potential for splashing, use a full-face shield.
Skin Protection	The following protective materials are recommended. Gloves - neoprene, nitrile-butadiene rubber, butyl rubber. Thin disposable gloves should be avoided for repeated or long term use. Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH.
Respiratory Protection	Not ordinarily required
Protective Clothing	Avoid contact with eyes. Wear safety goggles as appropriate. Wear chemical resistant clothing as required to minimize contact

## Section 10. Stability and Reactivity

Hazardous Decomposition Products	Carbon monoxide, aldehydes, acids and other organic substances may be formed during the combustion or thermal or oxidative decomposition. Reaction with some curing agents may produce considerable heat (exothermic). Run-A-Way cure reactions may char and decompose the resin system, generating unidentified fumes and vapors which may be toxic.
Chemical Stability	Stable at room temperature
Conditions to Avoid	Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids, and strong mineral and organic bases, especially primary and secondary aliphatic amines.

## Section 11. Toxicological Information

Acute Toxicity Data	(1) Bis A epichlorohydrin: Acute Oral LD50: 11.4g/kg (rat) / Acute Dermal LD50: <20g/kg (rabbit) / Acute Inhalation LD50: No Deaths, SAT. Air, 8 hr
Inhalation	Not expected to be relevant route of exposure. However, high vapor or aerosol mist concentrations may be irritating to the nose, throat and upper respiratory tract.
Skin Contact	Moderate irritant. Repeated and/or prolonged contact may cause skin sensitization.
Eye Contact	The aerosol, vapor or liquid will irritate human eyes following contact.
Ingestion	Ingestion may cause irritation of the gastrointestinal tract. This product is considered to have a low order of acute oral toxicity.
Chronic Effects	Repeated contact can cause skin sensitization. Preexisting skin, eye and respiratory may be aggravated by exposure to this product.
Carcinogenicity	Epichlorohydrin, CAS 106-89-8, an impurity in this product, (<50 PPM), has been reported to produce cancer in laboratory animals and to produce mutagenic changes in bacteria and cultured human cells. It has been established by the International Agency for Research on Cancer (IARC) as a probable human carcinogen (IARC Group 2A) based on the following conclusions: Human evidence - inadequate; animal evidence - sufficient. It has been classified as an anticipated human carcinogen by the National Toxicology Program (NTP)
Mutagenicity	There is no substantial evidence of mutagenic potential.
Reproductive Effects	No adverse reproductive effects are anticipated.
Teratogenicity and Fetotoxicity	No information is available and no adverse teratogenic embryotoxic effects are anticipated.

## Section 12. Ecological Information

Environmental Release Information	Keep out of surface waters, sewers and waterways entering or leading to surface waters. Notify authorities if any exposure to the general public or environment occurs or is likely to occur.
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## Section 13. Disposal

Disclaimer	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 N/A  
UN Proper Shipping Name Not Regulated  
DOT Classification Not Hazardous by DOT Regulations  
Packing Group N/A

## Section 15. Regulatory Information

Regulatory

This product is listed on the EPA/TSCA inventory of chemical substances. Protection of stratospheric ozone (pursuant to Section 611 of the Clean Air Act Amendment of 1990); Per 40 CFR Part 82, this product does not contain nor was it directly manufactured with any Class I or Class II ozone depleting substances. In accordance with SARA Title III, Section 313.

## Section 16. Other Information

Revision Date

4/3/2018

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.

HMIS Rating (Not Regulated)

The HMIS Rating for this product is:  
Health: 2 Flammability: 1 Reactivity: 0

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

For Information Purposes Only - No Longer Regulated