


Safety Data Sheet

RF 2022 Part A

Section 1. Identification

| | | | |
|------------------------------|--|----------------------------|----------------|
| Product Identifier | RF 2022 Part A | | |
| Synonyms | 33320 Part A; Formulated Epoxy Resin | | |
| Manufacturer Stock Numbers | 33320 Part A | | |
| Recommended use | Formulated Epoxy Resin | | |
| 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 | EYE DAMAGE/IRRITATION - Category 2B SENSITIZATION - SKIN - Category 1A SKIN CORROSION/IRRITATION - Category 2 |
| Signal Word | Warning |
| Pictogram |  |
| Hazard Statements | May be harmful if inhaled May be harmful if swallowed May cause an allergic skin reaction May cause sensitization by continuous contact with skin or vapors (especially if heated). Moderate eye irritation Moderately irritating to skin |

Precautionary Statements

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|------------|--|
| 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 skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. |
| Prevention | Avoid breathing dust/fume/gas/mist/ vapors/spray. Based on product testing product is generally considered to have a low order of acute oral toxicity Not likely to produce any adverse effect by inhalation Wear protective gloves. |
| Storage | Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. |
| Disposal | Large Spills: Wear respirator and protective clothing as appropriate. Shut off source of leak 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; dispose of properly. Flush area with water to remove trace residue. Small Spills: Take up with an absorbant material and dispose of properly. Preparing wastes for disposal: Solidify with clay or other absorbent in a steel drum. Consult your local authorities for an appropriate disposal facility Spill Response Procedures: May burn although not readily ignitable. Use cautious judgment when cleaning up large spills. |

Ingredients of unknown toxicity 0%

Hazards not Otherwise Classified

No Data Available

Section 3. Ingredients

| CAS | Ingredient Name | Weight % |
|------------|---|----------|
| | Mica Inert Filler | 40-60% |
| 25068-38-6 | Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane | 40-60% |

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

Section 4. First-Aid Measures

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|------------|---|
| 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 |
| Skin | In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash (or discard) clothing and shoes before reuse. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. |
| 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. |
| Skin | Pre-existing skin allergies may increase the chance of developing increased allergy symptoms from exposure to this product. Pre-existing skin and eye disorders may be aggravated by exposure to this product. |

Section 5. Fire Fighting Measures

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|--------------------------------|--|
| Suitable Extinguishing Media | Carbon dioxide, dry chemical, appropriate foam or FOG. If water is used, very large quantities are required. Contain runoff water with temporary barriers. |
| Unsuitable Extinguishing Media | N/A |
| Flash Point | Flash Point: 480°F |
| Auto Ignition Temperature | Auto Ignition Temperature: Not Available |
| Flammable Limits (Lower) | Flammable Limits (Lower): Not Available |
| Flammable Limits (Upper) | Flammable Limits (Upper): Not Available |

Section 6. Accidental Release Measures

Spill Response Procedures May burn although not readily ignitable. Use cautious judgment when cleaning up large spills. 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. Shut off source of leak if safe to do so. Prevent further leakage, spillage or entry into drains. Dike and contain. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbant suck as clay, sand or other suitable material; dispose of properly. Flush area with water to remove trace residue. Small Spills - Take up with an absorbent material and dispose of properly.

Preparing wastes for disposal: Solidify with clay or other absorbent in a steel drum, Consult your local authorities for an appropriate disposal facility.

Section 7. Handling and Storage

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|------------------------------|--|
| Handling | Use with adequate ventilation. |
| Respiratory Protection | Not ordinarily required. If resin is warmed or heated, vapors or mists may be produced. In such cases, use a NIOSH-approved respirator as required to prevent overexposure. In accord with 29 CFR 1910.134, use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors. |
| Eye Protection | Wear safety glasses or goggles as appropriate |
| Gloves | Wear chemical-resistant gloves and other clothing as required to minimize skin contact |
| Other Clothing and Equipment | Avoid prolonged or repeated contact with the skin. Wear chemical-resistant gloves and other clothing as required to minimize skin contact. |
| Hygienic Practices | Laundry contaminated clothes before wearing. Do not smoke or eat where this material is being used. Wash hands before smoking, eating or going to the bathroom |

Section 8. Exposure Controls/Personal Protection

| Occupational Exposure Limits | Ingredient Name | ACGIH TLV | OSHA PEL | STEL |
|-------------------------------|---|-----------|----------|------|
| | Mica Inert Filler | N/A | N/A | N/A |
| | Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane | N/A | N/A | N/A |
| Personal Protective Equipment | Goggles, Gloves, Apron, Respirator, PROTECTIVE CLOTHING, VENTILATION | | | |
| Engineering controls | Ventilation is normally required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. | | | |
| Respirators | This material does not have established exposure limits. Wear a positive-pressure air-supplied respirator in situations where there may be potential for airborne exposure. | | | |
| Eye Protection | Chemical safety goggles. If there is a potential for splashing, use a full-face shield. | | | |
| Other clothing | The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Nitrile rubber and PVC are not suitable protective materials; Neoprene is recommended. | | | |
| Hygienic Practices - Clothing | Laundry contaminated clothes before wearing. Do not smoke or eat where this material is being used. Wash hands before smoking, eating or going to the bathroom | | | |

Section 9. Physical and Chemical Properties

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|---------------------------------------|----------------|
| Physical State | Viscous liquid |
| Color | Light Yellow |
| Odor | N/A |
| Odor Threshold | N/A |
| Solubility | Negligible |
| Partition coefficient Water/n-octanol | N/A |
| VOC% | N/A |
| Viscosity | N/A |
| Specific Gravity | 1.1 |
| Density lbs/Gal | N/A |
| Pounds per Cubic Foot | N/A |
| Flash Point | 480° F |
| FP Method | TOC |
| 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 | 1 |
| 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 at room temperature |
| Conditions to Avoid | Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids. In reactions with many curing agents, considerable heat is released. |
| Compatibility | Incompatible with oxidizing agents |
| Hazardous Decomposition Products | Carbon monoxide, aldehydes and acids may be formed during combustion. Reaction with some curing agents may produce considerable heat. |
| Hazardous Polymerization | Will not occur |

Section 11. Toxicological Information

Toxicology Information No data

Section 12. Ecological Information

Ecological Information No data

Section 13. Disposal

Disposal Spill response procedures: May burn although not readily ignitable. Use cautious judgment when cleaning up large spills. Large Spills - Wear respirator and protective clothing as appropriate. Shut off source of leak 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; dispose of properly. Flush area with water to remove trace residue. Small Spills - Take up with an absorbent material and dispose of properly.

Preparing wastes for disposal: Solidify with clay or other absorbent in a steel drum. Consult your local authorities for an appropriate disposal facility.

Section 14. Transport Information

| | |
|-------------------------|---------------|
| UN Number | N/A |
| UN Proper Shipping Name | N/A |
| DOT Classification | Not Regulated |
| Packing Group | N/A |

Section 15. Regulatory Information

Regulatory This product does not contain chemicals known to the State of California to cause Cancer.

Section 16. Other Information

Revision Date 3/6/2015

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

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 2022 Part B (All Mods)

Section 1. Identification

| | | | |
|----------------------------|--|----------------------------|----------------|
| Product Identifier | RF 2022 Part B (All Mods) | | |
| Synonyms | Diethylenetriamine; Amine epoxy curing agent; 33320 Part B | | |
| Manufacturer Stock Numbers | 33320 Part B | | |
| Recommended use | Amine epoxy curing agent | | |
| Uses advised against | Can react vigorously with strong oxidizing agents, Nitrous acid and other nitrosating agents, strong Lewis or mineral acids, organic acids such as acetic or citric acid. In reactions with many curing agents, considerable heat is released. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Avoid Nitrogen Oxides (NOx). Nitrogen oxide can react with water vapors to form corrosive nitric acid | | |
| Manufacturer Contact | Resin Formulators 18027 Bishop Avenue Carson, CA, 90746 USA | | |
| Address | 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 | ASPIRATION HAZARD - Category 1A EYE DAMAGE/IRRITATION - Category 2A |
| Signal Word | Danger |
| Pictogram |  |
| Hazard Statements | Causes serious eye irritation or burns. Do not get product in eyes. Wash thoroughly after handling |

CAUTION! May cause irritation to upper respiratory tract. Avoid prolonged or repeated inhalation. May cause nausea, vomiting and sensitization of the respiratory tract
 Harmful if inhaled
 Inhalation may be irritating, to respiratory system, eyes and skin
 May cause sensitization by continuous contact with skin or vapors (especially if heated).

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 (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 If swallowed: Rinse mouth. Do NOT induce vomiting.
 Immediately call a poison center/doctor/ ...
 Specific treatment (see ... on this label)
 Wash contaminated clothing before reuse.

Prevention

Avoid breathing dust/fume/gas/mist/ vapors/spray.
 Do not breathe dust/fume/gas/mist/ vapors/spray.
 In case of inadequate ventilation wear respiratory protection.
 Use only outdoors or in a well-ventilated area.
 Wash ...thoroughly after handling.
 Wear eye protection/face protection.
 Wear protective Butyl Gloves, Face Shield, Eye Bath and Safety Shower.
 Wear protective gloves/protective clothing/eye protection/face protection.

Storage

Store locked up.

Disposal

Dispose of contents/container to ...

Ingredients of unknown toxicity 0%

Hazards not Otherwise Classified

No Data Available

Section 3. Ingredients

| CAS | Ingredient Name | Weight % |
|----------|--------------------------------------|----------|
| 111-40-0 | 1,2-Ethanediamine, N-(2-aminoethyl)- | ** % |

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

Section 4. First-Aid Measures

No Data Available

Section 5. Fire Fighting Measures

Suitable Extinguishing Media N/A

Unsuitable Extinguishing Media N/A

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)- | 1ppm, 4mg/m3 Time Weighted Average (TWA) | N/A | N/A |
| Personal Protective Equipment | N/A | | | |

Section 9. Physical and Chemical Properties

| | |
|---------------------------------------|-----|
| Physical State | N/A |
| Color | N/A |
| Odor | N/A |
| Odor Threshold | N/A |
| Solubility | N/A |
| Partition coefficient Water/n-octanol | N/A |
| VOC% | N/A |
| Viscosity | N/A |
| Specific Gravity | 1 |
| Density lbs/Gal | N/A |
| Pounds per Cubic Foot | N/A |
| Flash Point | N/A |
| 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

No Data Available

Section 11. Toxicological Information

No Data Available

Section 12. Ecological Information

No Data Available

Section 13. Disposal

No Data Available

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 | 3/6/2015 |
| | No Data Available |