



SAFETY DATA SHEET

Revision Date: 13-Jul-2018

Revision Number: 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name POLYAMIDE EPOXY PRIMER RED
Product Code V150-20
Alternate Product Code V15020
Product Class EPOXY
Color Red
Recommended use Industrial paint
Restrictions on use No information available

Manufacturer Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 1-866-708-9180
corotechcoatings.com

Emergency Telephone
CHEMTREC (US): 800-424-9300
CHEMTREC (outside US): (703)-527-3887

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|-------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |
| Carcinogenicity | Category 1A |
| Specific target organ toxicity (repeated exposure) | Category 2 |
| Aspiration toxicity | Category 1 |
| Flammable liquids | Category 3 |

Label elements

Danger

Hazard statements

Causes skin irritation
Causes serious eye irritation
May cause cancer
May cause damage to organs through prolonged or repeated exposure
May be fatal if swallowed and enters airways

Flammable liquid and vapor



Appearance liquid

Odor solvent

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Wear eye/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing

If eye irritation persists: Get medical advice/attention

Skin

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other information

No information available

Other hazards

IMPORTANT: Designed to be mixed with other components. Mixture will have hazards of all components. Before opening packages, read all warning labels. Follow all precautions.

3. COMPOSITION INFORMATION ON COMPONENTS

| Chemical name | CAS No. | Weight-% |
|--|------------|----------|
| Xylene | 1330-20-7 | 15 |
| Iron oxide | 1309-37-1 | 10 |
| Ethyl benzene | 100-41-4 | 5 |
| Solvent naphtha, petroleum, light aromatic | 64742-95-6 | 5 |
| n-Butyl alcohol | 71-36-3 | 5 |
| Zinc phosphate | 7779-90-0 | 5 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 5 |
| Silica, mica | 12001-26-2 | 5 |
| Zinc oxide | 1314-13-2 | 1 |
| Silica, crystalline | 14808-60-7 | 0.5 |

4. FIRST AID MEASURES

Description of first aid measures

| | |
|--|---|
| General Advice | If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance. |
| Eye Contact | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. |
| Skin Contact | Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician. |
| Inhalation | Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration. Call a physician immediately. |
| Ingestion | Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician. |
| Protection Of First-Aiders | Use personal protective equipment. |
| Most Important Symptoms/Effects | No information available. |
| Notes To Physician | Treat symptomatically. |

5. FIRE-FIGHTING MEASURES

| | |
|-------------------------------------|--|
| Flammable Properties | Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause flash fire. |
| Suitable Extinguishing Media | Foam, dry powder or water. Use extinguishing measures |

| | |
|--|---|
| | that are appropriate to local circumstances and the surrounding environment. |
| Protective Equipment And Precautions For Firefighters | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. |
| Hazardous combustion products | Burning may result in carbon dioxide, carbon monoxide and other combustion products of varying composition which may be toxic and/or irritating. |
| Specific Hazards Arising From The Chemical | Flammable. Flash back possible over considerable distance. Keep product and empty container away from heat and sources of ignition. Closed containers may rupture if exposed to fire or extreme heat. Thermal decomposition can lead to release of irritating gases and vapors. |
| Sensitivity To Mechanical Impact | No |
| Sensitivity To Static Discharge | Yes |
| Flash Point Data | |
| Flash Point (°F) | 80.0 |
| Flash Point (°C) | 26.7 |
| Method | PMCC |
| Flammability Limits In Air | |
| Lower flammability limit: | Not available |
| Upper flammability limit: | Not available |

NFPA **Health:** 2 **Flammability:** 3 **Instability:** 0 **Special:** Not Applicable

NFPA Legend

- 0 - Not Hazardous
- 1 - Slightly
- 2 - Moderate
- 3 - High
- 4 - Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

6. ACCIDENTAL RELEASE MEASURES

| | |
|-----------------------------|--|
| Personal Precautions | Remove all sources of ignition. Take precautions to prevent flashback. Ground and bond all containers and handling equipment. Take precautionary measures against static discharges. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. |
| Other Information | Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be |

advised if significant spillages cannot be contained.

Environmental precautions See Section 12 for additional Ecological Information.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material. Use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not breathe vapors or spray mist. Use only in ventilated areas. Prevent vapor build-up by providing adequate ventilation during and after use.

Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and flame. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Ignition and/or flash back may occur.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children.

Incompatible Materials Incompatible with strong acids and bases and strong oxidizing agents.

Technical measures/Precautions Ensure adequate ventilation. Use only where airflow will keep vapors from building up in or near the work area in adjoining rooms. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing and disposal of flammable liquids.

Dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. All equipment should be non-sparking and explosion proof. Use explosion proof electrical equipment for ventilation, lighting and material handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

| Chemical name | ACGIH TLV | OSHA PEL |
|---------------------|--|---|
| Xylene | 100 ppm - TWA 150 ppm - STEL | 100 ppm - TWA 435 mg/m ³ - TWA |
| Iron oxide | 5 mg/m ³ - TWA | 10 mg/m ³ - TWA 15 mg/m ³ - TWA Rouge 5 mg/m ³ - TWA Rouge |
| Ethyl benzene | 20 ppm - TWA | 100 ppm - TWA 435 mg/m ³ - TWA |
| n-Butyl alcohol | 20 ppm - TWA | 100 ppm - TWA 300 mg/m ³ - TWA |
| Silica, mica | 3 mg/m ³ - TWA | 20 mppcf - TWA |
| Zinc oxide | 2 mg/m ³ - TWA 10 mg/m ³ - STEL | 5 mg/m ³ - TWA 15 mg/m ³ - TWA |
| Silica, crystalline | 0.025 mg/m ³ - TWA | - |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits

OSHA - Occupational Safety & Health Administration Exposure Limits

N/E - Not Established

Appropriate engineering controls**Engineering Measures** Ensure adequate ventilation, especially in confined areas.**Personal Protective Equipment****Eye/Face Protection**

Safety glasses with side-shields.

Skin Protection

Long sleeved clothing. Protective gloves.

Respiratory Protection

Use only with adequate ventilation. In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator specified for paint spray or organic vapors.

Hygiene Measures

Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------------|--------------------------|
| Appearance | liquid |
| Odor | solvent |
| Odor Threshold | No information available |
| Density (lbs/gal) | 13.45 - 13.55 |
| Specific Gravity | 1.61 - 1.63 |
| pH | No information available |
| Viscosity (cps) | No information available |
| Solubility(ies) | No information available |
| Water solubility | No information available |
| Evaporation Rate | No information available |
| Vapor pressure @20 °C (kPa) | No information available |
| Vapor density | No information available |
| Wt. % Solids | 75 - 85 |
| Vol. % Solids | 60 - 70 |
| Wt. % Volatiles | 15 - 25 |
| Vol. % Volatiles | 30 - 40 |
| VOC Regulatory Limit (g/L) | < 340 |
| Boiling Point (°F) | 243.0 |
| Boiling Point (°C) | 117.0 |
| Freezing Point (°F) | No information available |
| Freezing Point (°C) | No information available |
| Flash Point (°F) | 80.0 |
| Flash Point (°C) | 26.7 |
| Method | PMCC |
| Flammability (solid, gas) | Not applicable |
| Upper flammability limit: | No information available |
| Lower flammability limit: | No information available |
| Autoignition Temperature (°F) | No information available |
| Autoignition Temperature (°C) | No information available |
| Decomposition Temperature (°F) | No information available |

| | |
|---------------------------------------|--------------------------|
| Decomposition Temperature (°C) | No information available |
| Partition coefficient | No information available |

10. STABILITY AND REACTIVITY

| | |
|---|---|
| Reactivity | No data available |
| Chemical Stability | Stable under normal conditions. Hazardous polymerisation does not occur. |
| Conditions to avoid | Keep away from open flames, hot surfaces, static electricity and sources of ignition. Sparks. Elevated temperature. |
| Incompatible Materials | Incompatible with strong acids and bases and strong oxidizing agents. |
| Hazardous Decomposition Products | Thermal decomposition can lead to release of irritating gases and vapors. |
| Possibility of hazardous reactions | None under normal conditions of use. |

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Principal Routes of Exposure Eye contact, skin contact and inhalation.

Acute Toxicity

Product Information Repeated or prolonged exposure to organic solvents may lead to permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|-----------------------------|--|
| Eye contact | Contact with eyes may cause irritation. |
| Skin contact | May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the skin and produce dermatitis. |
| Ingestion | Harmful if swallowed. Ingestion may cause irritation to mucous membranes. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death. |
| Inhalation | Harmful by inhalation. High vapor / aerosol concentrations are irritating to the eyes, nose, throat and lungs and may cause headaches, dizziness, drowsiness, unconsciousness, and other central nervous system effects. |
| Sensitization | No information available |
| Neurological Effects | No information available. |

| | |
|---------------------------------|--|
| Mutagenic Effects | No information available. |
| Reproductive Effects | No information available. |
| Developmental Effects | No information available. |
| Target organ effects | No information available. |
| STOT - repeated exposure | Causes damage to organs through prolonged or repeated exposure if inhaled. Causes damage to organs through prolonged or repeated exposure. |
| STOT - single exposure | May cause disorder and damage to the. Respiratory system. |
| Other adverse effects | No information available. |
| Aspiration Hazard | May be harmful if swallowed and enters airways. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death. |

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

| | |
|--------------------------------------|-------------|
| ATEmix (oral) | 9936 mg/kg |
| ATEmix (dermal) | 8463 mg/kg |
| ATEmix (inhalation-dust/mist) | 12.7 mg/L |
| ATEmix (inhalation-vapor) | 1086.5 mg/L |

Acute Toxicity

Component Information

Xylene

LD50 Oral: 4300 mg/kg (Rat)

LD50 Dermal: > 1700 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 5000 ppm (Rat, 4 hr.)

Iron oxide

LD50 Oral: > 5000 mg/kg (Rat) vendor data

Ethyl benzene

LD50 Oral: mg/kg (Rat)

LD50 Dermal: > mg/kg (Rabbit)

LC50 Inhalation (Vapor): mg/m³ (Rat, 2 hr.)

Solvent naphtha, petroleum, light aromatic

LD50 Oral: 8400 mg/kg (Rat)

n-Butyl alcohol

LD50 Oral: 790 - 800 mg/kg (Rat)

LD50 Dermal: 3400 mg/kg

LC50 Inhalation (Vapor): 24000 mg/m³ (Rat, 4 hr.)

1,2,4-Trimethylbenzene

LD50 Oral: 5000 mg/kg (Rat)

LC50 Inhalation (Vapor): 18000 mg/m³ (Rat, 4 hr.)

Silica, mica

LD50 Oral: > 16000 mg/kg (Rat)

Zinc oxide

LD50 Oral: 5000 mg/kg (Rat)

LC50 Inhalation (Dust): > 5700 mg/m³ (Rat, 4 hr.)

Silica, crystalline

LD50 Oral: 500 mg/kg (Rat)

Carcinogenicity

The information below indicates whether each agency has listed any ingredient as a carcinogen:

| Chemical name | IARC | NTP | OSHA |
|---------------------|--------------------------------|------------------------|--------|
| Ethyl benzene | 2B - Possible Human Carcinogen | | Listed |
| Silica, crystalline | 1 - Human Carcinogen | Known Human Carcinogen | Listed |

• Crystalline Silica has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint.

Legend

IARC - International Agency for Research on Cancer

NTP - National Toxicity Program

OSHA - Occupational Safety & Health Administration

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

The environmental impact of this product has not been fully investigated.

Product Information

Acute Toxicity to Fish

No information available

Acute Toxicity to Aquatic Invertebrates

No information available

Acute Toxicity to Aquatic Plants

No information available

Persistence / Degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

No information available.

Ozone

Not applicable

Component Information

Acute Toxicity to Fish

Xylene

LC50: 13.5 mg/L (Rainbow Trout - 96 hr.)

Ethyl benzene

LC50: 12.1 mg/L (Fathead Minnow - 96 hr.)

Acute Toxicity to Aquatic Invertebrates

Ethyl benzene

EC50: 1.8 mg/L (Daphnia magna - 48 hr.)

Acute Toxicity to Aquatic Plants

Ethyl benzene

EC50: 4.6 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

13. DISPOSAL CONSIDERATIONS

| | |
|--------------------------------|---|
| Waste Disposal Method | Dispose of in accordance with federal, state, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options. |
| Empty Container Warning | Emptied containers may retain product residue. Follow label warnings even after container is emptied. Residual vapors may explode on ignition. |

14. TRANSPORT INFORMATION

DOT

| | |
|-----------------------------|-----------------------|
| Proper Shipping Name | PAINT |
| Hazard class | 3 |
| UN-No. | UN1263 |
| Packing Group | III |
| Description | UN1263, PAINT, 3, III |

ICAO / IATA Contact the preparer for further information.

IMDG / IMO Contact the preparer for further information.

15. REGULATORY INFORMATION

International Inventories

TSCA: United States Yes - All components are listed or exempt.
DSL: Canada Yes - All components are listed or exempt.

Federal Regulations

SARA 311/312 hazardous categorization

| | |
|-----------------------------------|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire hazard | Yes |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| <u>Chemical name</u> | <u>CAS No.</u> | <u>Weight-%</u> | <u>CERCLA/SARA 313 (de minimis concentration)</u> |
|------------------------|----------------|-----------------|---|
| Xylene | 1330-20-7 | 15 | 1.0 |
| Ethyl benzene | 100-41-4 | 5 | 0.1 |
| n-Butyl alcohol | 71-36-3 | 5 | 1.0 |
| Zinc phosphate | 7779-90-0 | 5 | 1.0 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 5 | 1.0 |

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

| <u>Chemical name</u> | <u>CAS No.</u> | <u>Weight-%</u> | <u>Hazardous Air Pollutant (HAP)</u> |
|----------------------|----------------|-----------------|--|
| Xylene | 1330-20-7 | 15 | Listed |
| Ethyl benzene | 100-41-4 | 5 | Listed |

US State Regulations**California Proposition 65**

 **WARNING:** Cancer and Reproductive Harm– www.P65warnings.ca.gov

State Right-to-Know

| <u>Chemical name</u> | <u>Massachusetts</u> | <u>New Jersey</u> | <u>Pennsylvania</u> |
|------------------------|----------------------|-------------------|---------------------|
| Xylene | X | X | X |
| Iron oxide | X | X | X |
| Ethyl benzene | X | X | X |
| n-Butyl alcohol | X | X | X |
| Zinc phosphate | | X | X |
| 1,2,4-Trimethylbenzene | X | X | X |
| Silica, mica | X | X | X |
| Silica, crystalline | X | X | X |

Legend

X - Listed

16. OTHER INFORMATION

HMIS - **Health:** 2* **Flammability:** 3 **Reactivity:** 0 **PPE:** -

HMIS Legend

0 - Minimal Hazard

1 - Slight Hazard

2 - Moderate Hazard

3 - Serious Hazard

4 - Severe Hazard

* - Chronic Hazard

X - Consult your supervisor or S.O.P. for "Special" handling instructions.

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or

risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer, has chosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Prepared By Product Stewardship Department
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
800-225-5554

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Revision Summary Not available

Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

END OF SAFETY DATA SHEET