



SAFETY DATA SHEET

Revision Date: 13-Jul-2018

Revision Number: 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name 100% SOLIDS EPOXY PRE-PRIMER CATALYST
Product Code V155-90
Alternate Product Code V15590
Product Class CATALYST
Color Clear
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)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

Harmful if swallowed
Harmful if inhaled

Causes severe skin burns and eye damage
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
Suspected of causing cancer
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
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
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

Immediately call a POISON CENTER or doctor/physician

Eyes

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

Immediately call a POISON CENTER or doctor/physician

Skin

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

If skin irritation or rash occurs: Get medical advice/attention

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

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 INGREDIENTS

Chemical name	CAS No.	Weight-%
1,2-Ethanediamine, N,N-bis(1,3-dimethylbutylidene)-	25707-70-4	85
Phenol, 2,4,6-tris[(dimethylamino)methyl]-	90-72-2	10
Benzyl alcohol	100-51-6	5
Ethylenediamine	107-15-3	5
2-Pentanone, 4-methyl-	108-10-1	5

4. FIRST AID MEASURES

General Advice	Immediate medical attention is required.
Eye Contact	Immediate medical attention is required. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see 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	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Burning.

Notes To Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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.
Specific Hazards Arising From The Chemical	Combustible material. Closed containers may rupture if exposed to fire or extreme heat. Keep product and empty container away from heat and sources of ignition. 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)	135
Flash Point (°C)	57
Method	PMCC
Flammability Limits In Air	
Lower flammability limit:	Not available
Upper flammability limit:	Not available

NFPA **Health:** 2 **Flammability:** 2 **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	Use personal protective equipment. Remove all sources of ignition.
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. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Wear personal protective equipment. 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 open flames, hot surfaces and sources of ignition.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL
Ethylenediamine	10 ppm - TWA Skin	10 ppm - TWA 25 mg/m ³ - TWA
2-Pentanone, 4-methyl-	20 ppm - TWA 75 ppm - STEL	100 ppm - TWA 410 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

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 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. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid
Odor solvent

Odor Threshold	No information available
Density (lbs/gal)	7.3 - 7.4
Specific Gravity	0.87 - 0.90
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	90 - 100
Vol. % Solids	90 - 100
Wt. % Volatiles	0 - 10
Vol. % Volatiles	0 - 10
VOC Regulatory Limit (g/L)	< 100
Boiling Point (°F)	212
Boiling Point (°C)	100
Freezing Point (°F)	No information available
Freezing Point (°C)	No information available
Flash Point (°F)	135
Flash Point (°C)	57
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	Not Applicable
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.
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 Redness. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

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

Eye contact Severely irritating to eyes. May cause burns. Risk of serious damage to eyes.
Skin contact May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the skin and produce dermatitis.

Ingestion 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 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 May cause sensitization by inhalation. May cause sensitization by skin contact.

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. Central nervous system.

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)	559 mg/kg
ATEmix (dermal)	7650 mg/kg
ATEmix (inhalation-dust/mist)	1.7 mg/L
ATEmix (inhalation-vapor)	14 mg/L

Component Information

Acute Toxicity

Phenol, 2,4,6-tris[(dimethylamino)methyl]-

LD50 Oral: 1200 mg/kg (Rat)
 LD50 Dermal: 1280 mg/kg (Rat)

Benzyl alcohol

LD50 Oral: 1230-1660 mg/kg (Rat)
 LD50 Dermal: 2,000 mg/kg (Rabbit)
 LC50 Inhalation (Vapor): > 5,000 mg/m³ (Rat)

Ethylenediamine

LD50 Oral: 1200 mg/kg (Rat)
 LD50 Dermal: 730 mg/kg (Rabbit)

2-Pentanone, 4-methyl-

LD50 Oral: 2080-4600 mg/kg (Rat)
 LC50 Inhalation (Vapor): 100000 mg/m³

Carcinogenicity

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

Chemical name	IARC	NTP	OSHA
2-Pentanone, 4-methyl-	2B - Possible Human Carcinogen		Listed

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

No information available

Component Information

Acute Toxicity to Fish

No information available

Acute Toxicity to Aquatic Invertebrates

No information available

Acute Toxicity to Aquatic Plants

No information available

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, CORROSIVE, FLAMMABLE
Hazard class	8
Subsidiary Class	3
UN-No.	UN3470
Packing Group	II
Description	UN3470, PAINT, CORROSIVE, FLAMMABLE, 8 (3), II

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>
2-Pentanone, 4-methyl-	108-10-1	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>
2-Pentanone, 4-methyl-	108-10-1	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>
Benzyl alcohol	X		X
Ethylenediamine	X	X	X
2-Pentanone, 4-methyl-	X	X	X

Legend

X - Listed

16. OTHER INFORMATION

HMIS - **Health: 2*** **Flammability: 2** **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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