#### Technical Data Sheet

P-03 1K Epoxy Concrete Primer

# POLYMER NATION CHEMICAL COMPANY, LLC



Product Overview: P-03 is a revolutionary, single component, epoxy amine adduct. It has excellent adhesion to concrete and provides fast dry and early hardness properties.

Uses: P-03 is most often used as a concrete floor primer but can also be used as a vertical primer on concrete and wallboard, as a body coat and as a finish coat. It has good UV resistance, compared with most epoxies and has very low odor. It is easy to apply and provides an excellent base layer for subsequent coatings of all types.

Preparation: The preparation method for each project is determined by a full understanding of the substrate to be coated, the chemistry of the coating system being used, the coating system thickness, and numerous other factors. The coating installer should fully read and understand ICRI Guideline NO.03732 and OSHA 29 CFR 1926.1153 before starting preparatory work. The aim, of preparing a substrate for coating applications, is to roughen the surface, remove weak layers, contaminants, dirt, debris and present a solid, clean, dry substrate for the primer. If unsure as to the level of preparation needed contact Polymer Nation at Lab@polymerNation.com.

The data below represents the most pertinent information needed by a professional installer to understand and efficiently install this material. The data was gathered at temperatures of 72-75 F and 30-50% RH. A wide array of independent and company test data has been compiled on this product but is too large to place on this Technical Data Sheet. Please direct inquiries for detailed test reports on this product to Lab@polymerNation.com

Description	Results	Notes	
Kit Yield in Gallons	5	Material can be supplied in larger packaging upon request and with minimum quantities	
Number of Components	1		
Mix Ratio Liquids by Volume	N/A	Stir the entire content prior to use to insure complete and even mixture	
Ideal Application Temperatures	60F-90F	Verify that substrate temperature is above 5 degrees of dewpoint during application and cure of material to avoid a potential amine blush	
Mixed Viscosity in cP@25C/77F	700	Warmer temperatures will reduce viscosity and lower temperatures will increase viscosity	
Gel Time	N/A	Warmer temperatures will decrease gel time and lower temperatures will increase gel time	
Dry to Touch	30 min.	Warmer temperatures will reduce time and colder temperatures will increase time	
Through Dry	1 Hours	Warmer temperatures will reduce time and colder temperatures will increase time	
Dry to Walk	2 hours	Warmer temperatures will reduce time and colder temperatures will increase time	
Dry to Lightly Use	24 Hours	Warmer temperatures will reduce time and colder temperatures will increase time	
Full Cure	7 Days	Warmer temperatures will reduce time and colder temperatures will increase time	
Pendulum (König) Hardness at 24 hours	20	Warmer temperatures will increase hardness	
Pendulum (König) Hardness at 7 days	40	Warmer temperatures will shorten time to reach full hardness	
Gloss @ 60 Degree Angle	55-60	Applying material close to dew point will decrease gloss and may result in an amine blush	
VOC's of Mixed Material	<50 g/L	EPA Method 24	
Color Scale per ASTM D1500	N/A	Clear to slightly amber before colorants are introduced	
Solids by Volume Mixed	>58%		
Storage	60F-90F	Store material between 60-90 degrees F in a protected dry location.	
Odor	Subtle	Measuring odor offensiveness is difficult so experience with chemicals has been consulted here	
Application Thickness in Mils	5-8		
Disposal	Dispose of material, containers, solvents, etc., per Federal, State and local guideline, rules and laws		
Available Colors	Standard Solid Colors		
Mixing & Installation	Stir entire container at 350 RPM for 2-3 minutes using an appropriate mixing blade and making sure not to introduce excessive air into the solution. Apply using airless equipment, squeegee and brush and roll techniques. Recoat within 24 hours. Clean tools with a solvent similar to Xylene or Acetone.		

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

DATE PRINTED: 8/22/22 MSDS REF. No: P-03/E3

**Product Name:** P-03 Product Code: E3

Supplier/Manufacturer: POLYMER NATION CHEMICAL

> 1949 Swanson Court Gurnee, IL 60031 (847) 774-5038

**EMERGENCY PHONE:** CHEMTREC, US (800) 424-9300 24-hours

ORIGINAL DATE ISSUED: 3/19/13 **REVISION DATE**: 2/12/2020

Synonyms: NONE

Product Description: Modified alkaline epoxy resin partially neutralized in water-based emulsion

Molecular Formula: Mixture Molecular Weight: Mixture

Intended/Recommended Use: Binder

#### 2. HAZARDS IDENTIFICATION

**GHS Classification - Not Classified LABEL ELEMENTS - Not applicable** Hazard Statements - Not applicable **Precautionary Statements - Not applicable** 

Hazards Not Otherwise Classified (HNOC), Other Hazards - Not applicable

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

**HAZARDOUS INGREDIENTS** 

Component / CAS No. % GHS Classification				
1-Methoxy-2-propanol 107-98-2		Flam. Liq. 3 (H226) STOT SE 3 (H336)		

The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret. Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

# 4. FIRST AID MEASURES

#### **First-aid Measures**

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

**Skin Contact:** Wash immediately with plenty of water and soap.

**Eye Contact:** Rinse immediately with plenty of water for at least 15 minutes.

**Ingestion:** If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician.

Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects, Acute and Delayed: None known. Immediate Medical Attention and Special Treatment: Not applicable.

Notes To Physician: No specific measures have been identified.

#### 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use water spray, alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water stream may be ineffective.

**Protective Equipment:** Firefighters, and others exposed, wear self-contained breathing apparatus.

**Special Hazards:** Keep containers cool by spraying with water if exposed to fire.

## **6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

**Methods For Cleaning Up:** Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water. Remove sources of ignition.

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**Environmental Precautions:** None known.

References to other sections: See Sections 7, 8 and 13 for additional information.

#### 7. HANDLING AND STORAGE

**HANDLING** 

Precautions: Wash hands thoroughly after handling.

Special Handling Statements: Provide good ventilation of working area (local exhaust ventilation if necessary). During processing and handling of the product, comply with the indicative occupational exposure limit values. STORAGE - Store in a cool, dry, well-ventilated place and keep container tightly closed. Areas containing this material should have fire safe practices and electrical equipment in accordance with applicable regulations and/or guidelines. Standards are primarily based on the material's flashpoint but may also take into account properties such as miscibility with water or toxicity. All local and national regulations should be followed. In the Americas, National Fire Protection Association (NFPA) 30: Flammable and Combustible Liquids Code, is a widely used standard. NFPA 30 establishes storage conditions for the following classes of materials: Class I Flammable Liquids, Flashpoint <37.8 °C. Class II Combustible Liquids, 37.8 °C < Flashpoint <60 °C. Class IIIa Combustible Liquids, 60 °C < Flashpoint < 93 °C. Class IIIb Combustible Liquids, Flashpoint > 93 °C. Keep away from sources of ignition - refrain from smoking. Take precautionary measures against electrostatic loading - earthing necessary during loading operations. Sensitive to frost.

Storage Temperature: Store at 0 - 25 °C 32 - 77 °F Reason: Quality.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures:** Engineering controls are not usually necessary if good hygiene practices are followed. **Respiratory Protection:** For operations where inhalation exposure can occur use an approved respirator. Recommendations are listed below. Other protective respiratory equipment may be used based on user's own risk assessment. Recommended respirators include those certified by NIOSH.

Recommended: Full Face Mask with organic vapor cartridge, Type A filter (BP >65°C)

**Eye Protection:** Wear eye/face protection such as chemical splash proof goggles or face shield.

**Skin Protection:** Avoid skin contact. Wear impermeable gloves and suitable protective clothing. Since this product is absorbed through the skin, care must be taken to prevent skin contact and contamination of clothing. **Hand Protection:** Wear protective gloves. Recommendations are listed below. Other protective materials may be used based on user's own risk assessment. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Replace gloves immediately when torn or any change in appearance (dimension, color, flexibility etc.) is noticed.

Gloves for repeated or prolonged exposure - non exhaustive list: Butyl rubber (VB), thickness: > 0.30 mm, break through time: up to 480 min

Gloves for short term exposure/splash protection - non exhaustive list: Nitrile rubber (NBR), thickness: 0.38 mm, break through time: up to 240 min Natural rubber (NRL), thickness: 0.75 mm, break through time: up to 30 min. The chemical resistance depends on the type of product and amount of product on the glove. Therefore, gloves need to be changed when in contact with chemicals.

<u>Not suitable gloves</u> - non exhaustive list: Natural rubber (NRL), thickness: 0.12 mm. Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing. Use PE gloves as under gloves for difficult situations like for instance: high exposure, unknown composition, or unknown properties of the chemicals.

Additional Advice: Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

**Exposure Limit(s)** 

107-98-2 1-Methoxy-2-propanol

OSHA (PEL): Not established 100 ppm (TWA) Not established

ACGIH (TLV): 150 ppm (STEL Other Value: Not established

**Biological Exposure Limit(s) -** No values have been established.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Color:** Yellow to brown **Appearance:** Liquid **Odor:** Characteristic

**Boiling Point:** 60 -150°C140 -302°F **Melting Point:** Not available **Vapor Pressure:** Not available

Specific Gravity/Density: ~ 1.07 g/cm3 DIN EN ISO 2811-2 @ 20 °C

Vapor Density: Not available

Percent Volatile (% by wt.): 53.5 - 56.5 (water)

pH: 4 - 6 DINISO976

Saturation In Air (% By Vol.): Not available

**Evaporation Rate:** Not available

Solubility In Water: Completely miscible with water

Volatile Organic Content: Not available Flash Point: > 95 °C 203 °F ASTM D 6450 Flammable Limits (% By Vol): Not available Autoignition Temperature: Not available Decomposition Temperature: Not available

Partition coefficient (n-octanol/water): Not available

Odor Threshold: Not available Viscosity (Kinematic): Not available

Viscosity (Dynamic): 50 - 1000 mPa.s @ 23 °C DIN EN ISO 3219

**Explosive Properties:** Not available

Oxidizing Properties: No

## 10. STABILITY AND REACTIVITY

Reactivity: No information available

Stability: Stable

Conditions To Avoid: High temps Polymerization: Will not occur Conditions To Avoid: None known Materials To Avoid: None known

Hazardous Decomposition: Carbon monoxide (CO)

Products: Carbon dioxide

# 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Skin, Eyes, Oral.

Acute toxicity - oral: Not Classified - Based on available data and/or professional judgment, the classification

criteria are not met. Carbon dioxide

Acute toxicity - dermal: Not Classified - classification criteria are not met.

Acute toxicity - inhalation: Not Classified classification criteria are not met.

Skin corrosion / irritation: Not Classified - classification criteria are not met.

Serious eye damage / eye irritation: Not Classified - Based on available data and/or professional judgment, the

classification criteria are not met.

**Respiratory sensitization:** Not Classified - Based on available data and/or professional judgment, the classification

criteria are not met.

Skin sensitization: Not Classified - Based on available data and/or professional judgment, the classification criteria

are not met.

**Carcinogenicity:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Germ cell mutagenicity:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Reproductive toxicity:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**Specific target organ toxicity (STOT) - single exposure:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Specific target organ toxicity (STOT) - repeated exposure:** Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

**Aspiration hazard:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

#### PRODUCT TOXICITY INFORMATION

#### **ACUTE TOXICITY DATA**

Oral Rat Acute LD50 > 2000 mg/kg Dermal Rabbit Acute LD50 > 2000 mg/kg

Inhalation Rat Acute LC50 4 hr. > 5 mg/l (Dust/Mist)

## **LOCAL EFFECTS ON SKIN AND EYE**

Acute Irritation Dermal Not irritating
Acute Irritation Eye No data

#### **ALLERGIC SENSITIZATION**

Sensitization Skin No data Sensitization Respiratory No data

#### **GENOTOXICITY**

# **Assays for Gene Mutations**

Ames Salmonella Assay No data

#### OTHER INFORMATION

The product toxicity information above has been estimated.

#### HAZARDOUS INGREDIENT TOXICITY DATA

1-Methoxy-2-propanol has acute oral (rat) and acute dermal (rabbit) LD50 values of 3,739 mg/kg and 13 g/kg, respectively. The acute 6-hour inhalation LC50 (rat) value is >7000 ppm (31.59 mg/L/4hr). Direct contact with 1-Methoxy-2-propanol can cause mild skin and eye irritation. Exposure of 1-methoxy-2-propanol to animals via oral, dermal and inhalation routes have caused central nervous system effects. Inhalation overexposure has also been shown to cause minor effects on the liver, kidneys and lungs, and irritation to the eyes, and has been shown to cause fetotoxic effects. Repeat dermal exposure studies with 1-methoxy-2-propanol had shown evidence of kidney damage in fatally poisoned animals.

WARNING: Reproductive Harm – www.P65Warnings.ca.gov

#### 12. ECOLOGICAL INFORMATION

# TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

This material is not classified as dangerous for the environment. The ecological assessment for this material is based on an evaluation of its components.

**RESULTS OF PBT AND vPvB ASSESSMENT - Not determined** 

#### HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Fish		
1-Methoxy-2-propanol (107-98-2)	LC50 = 6812 mg/L - Pimephales promelas (96h)		

Component / CAS No.	Toxicity to Water Flea		
1-Methoxy-2-propanol (107-98-2)	EC50 = 23300 mg/L - Daphnia magna (48h)		

Component / CAS No.	Toxicity to Algae		
1-Methoxy-2-propanol (107-98-2)	EC50 > 1000 mg/L - Pseudokirchneriella		
	subcapitata (7d)		

Component / CAS No.	Partition coefficient
1-Methoxy-2-propanol (107-98-2)	log Kow = 0.37

#### 13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this SDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this SDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

# 14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

**US DOT** - Dangerous Goods? Not applicable/Not regulated

TRANSPORT CANADA - Dangerous Goods? Not applicable/Not regulated

ICAO / IATA - Dangerous Goods? Not applicable/Not regulated

IMO - Dangerous Goods? Not applicable/Not regulated

**SPECIAL PRECAUTIONS FOR USER** 

Protect against cold weather lower than +5°C/41°F.

# 15. REGULATORY INFORMATION

## **Inventory Information**

**United States (USA):** All components of this product are designated as "Active" on the TSCA Inventory or are not required to be listed. The final product contains a component exempt from the requirement of listing on the TSCA Inventory under the provisions of the Polymer Exemption, 40 CFR 723.250.

**Canada:** One or more components of this product are NOT included on the Canadian Domestic Substances List (DSL).

**European Economic Area (including EU):** When purchased and shipped from an Allnex legal entity based in the EEA (EU or Norway), this product is compliant with the registration of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt and/or registered.

**Australia:** One or more components of this product have NOT yet been included in the Australian Inventory of Industrial Chemicals (AIIC) or assessed by AICIS.

**New Zealand:** This product is approved or exempt under the Hazardous Substances and New Organisms (HSNO) Act.

**China:** One or more components of this product are NOT included on the Chinese (IECSC) inventory. The company has obtained the required notification approvals from the Ministry of Environmental Protection (MEP) as per the "Environmental Administrative Measures for New Chemical Substance" for the component(s) not listed in the Chinese Inventory (IECSC). The product can be imported/manufactured in China ONLY under specific conditions. **Japan:** All components of this product are included on the Japanese (ENCS and ISHL) inventories or are not

required to be listed on the Japanese inventories.

Korea: One or more components of this product are NOT included on the Korean (ECL) inventory.

Philippines: One or more components of this product are NOT included on the Philippine (PICCS) inventory.

**Taiwan:** All components of this product are included in the Taiwan chemical substance inventory or are not BECKOPOXTM EM 2120w/45WA Liquid SDS: 0038016 Date Prepared: 07/24/2020 Page 9 of 10 Coating Resin required to be listed on the Taiwan chemical substance inventory (TCSI).

**Turkey:** When purchased directly from Allnex by a Turkish legal entity, this product is compliant with the PRE-registration requirements of KKDIK as all its components are either pre-registered, excluded and/or exempt.

#### OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product. This product does not contain any components regulated under these sections of the EPA

## PRODUCT HAZARD CATEGORY UNDER SECTIONS 311 AND 312 OF EPCRA

**Physical Hazards:** Not applicable **Health Hazards:** Not applicable

## 16. OTHER INFORMATION

# NFPA Hazard Rating (National Fire Protection Association)

Health: 1 - Materials that, under emergency conditions, can cause significant irritation.

Fire: 1 - Materials that must be preheated before ignition can occur.

Instability: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

Reasons for Issue: Revised Section 3
Revised Section 15

Date Prepared: 07/24/2020

Date of last significant revision: 07/24/2020

**Component - Hazard Statements** 

1-Methoxy-2-propanol

H226 - Flammable liquid and vapor.

H336 - May cause drowsiness or dizziness. **Emergency phone numbers for other regions** 

**Asia Pacific** 

Australia: +61 1800 022 037 (Allnex Australia)

China (PRC): +86(0)25 8547 7110 (Jiangsu registration center) / +86(0)532 8388 9090 (NRCC) India: 000 800 100

7479 (toll free) or +65 3158 1198 (Carechem 24) Indonesia: 007 803 011 0293 (Carechem 24) Japan: +81 345 789 341 (Carechem 24)

Korea: +82 2 3479 8401 (Carechem 24) Malaysia: +60 3 6207 4347 (Carechem 24)

New Zealand: +64 0800 803 002 (Allnex New Zealand)

Philippines: +63 2 231 2149 (Carechem 24) Taiwan: +886 2 8793 3212 (Carechem 24) Vietnam: +84 8 4458 2388 (Carechem 24) All Others: +65 3158 1074 (Carechem 24) **Europe** +44 (0) 1235 239 670 (Carechem 24)

Middle East, Africa+44 (0) 1235 239 671 (Carechem 24)

**Latin America** 

Brazil: +55-800-707-7022 (toll free) or +55-11-98149-0850 (Suatrans 24)

Chile: +56 2 2582 9336 (Carechem 24)

Mexico and all others: +52-555-004-8763 (Carechem 24)

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