



## TECHNICAL DATA SHEET

### COSMO-EPOXY M-81

#### EPOXY POLYAMIDE MULTIPURPOSE ANTI-CORROSIVE SYSTEM

**DESCRIPTION:** COSMO-EPOXY M-81 EPOXY POLYAMIDE MULTIPURPOSE ANTI-CORROSIVE SYSTEM is formulated with zinc phosphate (ZP) pigment, for industrial and marine maintenance where a primer with excellent resistance and adhesion to the action of severe corrosive environments, abrasion, chemical agents (acids and alkalis), solvent and fresh water is needed. It has a long useful life, has excellent adhesion, toughness and flexibility. Contains water-repellent pigments and pigments for high impact resistance. Does not contain lead or chrome-based pigments.

**APPLICATIONS:** COSMO-EPOXY M-81 EPOXY POLYAMIDE MULTIPURPOSE ANTI-CORROSIVE SYSTEM contains a high-solids content and is a new multi-use technology product, which can be applied as a base (precoat) and also as a finish (topcoat) in an epoxy painting system. It has very good resistance to water, which is why it is used for painting the interior of tanks, cisterns and swimming pools. Due to its high hardness, it is recommended for surfaces exposed to aggressive environments.

#### TECHNICAL SPECIFICATIONS:

ITEM	SPECIFICATION	CHARACTERISTIC
1	TYPE	EPOXY-POLYAMIDE
2	SOLIDS IN VOLUME	81% ± 2
3	VOLATILE CONTENT (VOC)	150 g/L
4	COLORS	WHITE, GREY
5	FINISH	MATTE
6	COMPONENTS	PART A: PIGMENTED (1 gal) PART B: CATALYST-HARDENER (1 gal) TOTAL VOLUME: A + B = 2 gal
7	MIXING RATIO (IN VOLUME)	1 PART A: 1 PART B
8	RECOMMENDED DRY THICKNESS	5.0 - 10.0 mils
9	THEORETICAL PERFORMANCE	115.71 – 231.42 sq ft (10.75 – 21.50 m <sup>2</sup> ) /gal (5.0 – 10.0 mils DRY) (WITHOUT CONSIDERING LOSSES DUE TO APPLICATION AND TRANSFER OF THE PRODUCT)
10	DRY HEAT RESISTANCE	203°F (95°C)
11	DILUTION SOLVENTS	COSMO-EPOXY B-81 EPOXY THINNER
12	INDUCTION TIME	30 MIN (between 40 – 77 °F / 4.4 - 25 °C); 15MIN (100 °F / 38 °C)
13	SHELF LIFE OF THE MIX	10 h (40°F / 4.4 °C); 4 h (77°F / 25°C); 2 h (100 °F / 38°C)

#### DRYING TIMES, AT 7.0 WET MILS, AND 50% RELATIVE HUMIDITY\*:

	40 °F / 4.4 °C	77 °F / 25 °C	100 °F / 38 °C
Touch:	3 hours	1 hour	½ hour
For handling:	48 hours	8 hours	4½ hours
To repaint:			
(minimum):	48 hours	5½ hours	4 hours
(maximum):	3 months	3 months	3 months
To cure:			
(service):	10 days	7 days	4 days

(immersion):                    14 days                    7 days                    4 days

\*Drying times depend on temperature, relative humidity and applied thickness.

**SURFACE PREPARATION:** Remove all residue, oil, dirt, grease, dust, rust, contaminants and excessive moisture present on the surface. Refer to the Application Sheet for detailed information on surface preparation. A summary of the recommended preparation:

- .i. **Galvanized steel** -SSPC-SP1, SSPC-SP2, and SSPC-SP7
- .ii. **Aluminum** -SSPC-SP1
- .iii. **Concrete and Masonry (atmospheric service)** – NACE 6/SSPC-SP13
- .iv. **Concrete and Masonry (immersion service)** - NACE 6/SSPC-SP13, Section 4.3.1 or 4.3.2
- .v. **Iron and Steel (atmospheric service)**- SSPC-SP1, SSPC-SP2, and SSPC-SP6
- .vi. **Iron and Steel (immersion service)** - SSPC-SP1, and SSPC-SP10
- .vii. **Previously Painted Surfaces** – details in Application Guide

**PRODUCT PREPARATION:**

- Shake each component (A and B) separately, then mix and homogenize by stirring.
- Leave to rest for its induction time: 30 MIN (between 40 – 77 °F / 4.4 - 25 °C); 15MIN (100 °F / 38 °C).
- Then apply COSMO-EPOXY M-81 EPOXY POLYAMIDE MULTIPURPOSE ANTI-CORROSIVE SYSTEM.

**APPLICATION METHODS:**

- **BRUSH OR ROLLER** -Use COSMO-EPOXY M-81 EPOXY POLYAMIDE MULTIPURPOSE ANTI-CORROSIVE SYSTEM as it remains after catalyzing. Brush should be made of Nylon/Polyester or Natural Bristle, and the roller should be made of Plush 3/8" (9.53 mm) with a phenolic core.
- **AIRLESS PISTOL** -Reduce if necessary up to 10% by volume with epoxy thinner. Graco equipment or equivalent. Orifice .015" - .023" (0.381 - 0.584 mm), paint pressure 2500 – 3000 psi, No. 60 mesh filter. Pump 30:1. Hose 1/4" (6.35mm) ID.
- **CONVENTIONAL GUN** -Dilute if necessary, between 20% – 25% by volume with epoxy thinner. Equipment DeVilbiss MBC-510 or equivalent, Fluid Tip E, 704 Air Cap, Atomization pressure 50 – 80 psi, Paint pressure 20 psi.

**ENVIRONMENTAL CONDITIONS FOR APPLICATION:**

Temperature:                    40 °F / 4.4 °C minimum, 110 °F / 43.3 °C maximum (air, surface, and material)  
    At least 37 °F / 3 °C above dew point  
Relative Humidity:            85% maximum

**RECOMMENDED BASIC PAINT SYSTEMS\*:**

- **STEEL, EPOXY SYSTEMS – MODERATE SERVICE**  
1 EPOXY ANTI-CORROSIVE LAYER: 2 – 4 MILS  
1 COAT OF COSMO-EPOXY POLYAMIDE EPOXY ENAMEL: 3 – 4 DRY MILS
- **STEEL, EPOXY SYSTEM – HIGH INTENSITY SERVICE**  
1 COAT OF EPOXY ANTI-CORROSIVE: 2 – 4 MILS  
1 COAT OF COSMO-EPOXY POLYAMIDE EPOXY ENAMEL: 4 – 5 DRY MILS PER COAT
- **EPOXY STEEL, POLYURETHANE FINISH – HIGH INTENSITY SERVICE**  
1 COAT OF EPOXY ANTI-CORROSIVE: 2 – 4 DRY MILS  
1 COAT OF COSMO-EPOXY POLYAMIDE EPOXY ENAMEL: 3 - 4 DRY MILS  
1 COAT OF COSMO POLYURETHANE VARNISH: 2 – 3 DRY MILS

\*These detailed systems provide a point of reference; there are other equally appropriate systems.

**STORAGE CONDITIONS:** SHELF LIFE IS TWELVE (12) MONTHS UNMIXED AND UNDER NORMAL STORAGE CONDITIONS, IN A COOL AND VENTILATED ENVIRONMENT (77 °F / 25 °C).

**ADDITIONAL INFORMATION:** The data in this Technical Data Sheet represent typical values of the product characteristics. It is the user's responsibility to take appropriate measures in order to comply with the requirements established within their industry under current legislation. The information represents a general guide and should not be considered as a guarantee of its properties.

