

Manufacturer of Military Spec., Corps of Engrs. Spec, Industrial, & Marine Coatings

#### **TECHNICAL DATA SHEET**

# MIL-DTL-24441/19C (REVISION D) FORMULA 159, TYPE-III EPOXY POLYAMIDE ZINC PRIMER

**DESCRIPTION/CONFORMANCE:** This Epoxy-Polyamide two component Zinc Rich Coating is designed to conform the specific composition and performance requirement of Federal Specification MIL-DTL-24441/19C (SH) Formula-159, Type-III (Revision D) and is recommended to be used for painting land and marine structures.

### PRINCIPAL CHARACTERISTICS:

- -Excellent rust preventative properties in adverse or chemically polluted atmospheres.
- -Easy application by airless spray up to 4.0 mils (100 Microns) dry film thickness.
- -Good adhesion properties on sandblasted steel where a hard durable chemical resistant nonporous coating is desired.
- -Excellent water and weather resistance for interior and exterior use.
- -Good impact resistance

## **TECHNICAL DATA**

COLOR AND FINISH: Gray, Flat

MASS DENSITY (MIXED): Approx. 24.0 lbs./gallon

SOLIDS BY VOLUME: Approx. 65.0%

ZINC DUST PIGMENT (ASTM D520, TYPE-I): 86%

VOC (BEFORE THINNING): 2.48 - lbs./gal., 297 g/l

THEORETICAL SPREADING RATE:

**@ 1 MIL DFT:** 1040 sq. ft. /gal.

**RECOMMENDED DRY FILM THICKNESS:** 3-4 Mils (75-100 Microns)

TOUCH DRY AFTER: 2 Hrs.
DRY HARD AFTER: 6 Hrs.
MAX. INTERVAL BEFORE OVERCOATING: 7 Days
FULL CURE AFTER: 7 Days

**TEMPERATURE RESISTANCE (DRY):** 250°F (121°C)

SHELF LIFE (COOL & DRY PLACE): Subject to re inspection after 12 months.

FLASH POINT (TCC): Base 108°F (42°C)

Hardener 96°F (36°C)

PACKAGE: A two Component material with base and curing

agent supplied in 1-Gallon Kit and 2.5-Gallon Kit.

Mix ratio 4:1 by volume.

Simco Coatings Inc.

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**RECOMMENDED SUBSTRATE** 

CONDITIONS: Steel: Blast cleaned to a minimum grade SSPC-SP10 (SA2 1/2) The

surface must be perfectly dry.

MIXING & INDUCTION TIME REQUIREMENT: During application and the first 24 hours of curing, the substrate temperature must be above 41°F (5°C) and at least 5°F (3°C) above the dew point. The temperature of the mixture of base and hardener during mixing and application should be above 59 °F (15°C), otherwise more solvents must be used to obtain application viscosity. This results in lower sag resistance and slower cure. If thinner is used, it should only be added <u>after</u> mixing the components.

Using the proportion of 4:1 of Component B (Primer) to Component A (Hardener/Activator), do the following: Agitate Component B by itself with a hand spatula, and then slowly pour in Component A (Hardener/Activator) and mix till mixture is smooth and uniform. At a temperature range of 70 °F – 80 °F, let mixture stand for 15 - 20 minutes after mixing both components and before application. Colder temperatures will require a longer induction time.

POTLIFE: 4 Hours At 73°F

CONVENTIONAL SPRAY

Manufacturer:DeVilbissBinksGun Model:MBC or JGA#18 or #62

**Tip-Air Cap Combination:** 704E 66PE

Fluid hose should by 3/8" I.D. with a maximum length of 50 feet. Pot should always have dual regulation and be kept at

same elevation as spray gun.

**AIRLESS SPRAY** 

Manufacturer:GracoBinksDeVilbissGun Model:205-590Model 500JGN-501Pump:BulldogMercury 5CQFA-519

Hose should be 3/8" I.D. minimum, but 1/4" whip end section may be used for ease of application. A maximum length of 100 feet is suggested. Best results will be obtained using a

.018"-.021" tip at 2400-2700 p.s.i.

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### THINNING REQUIREMENT:

Recommended Thinner: MIL-T-81772, Type-II Epoxy Thinner

Airless Spray: 0-10% by Volume Conventional Spray: 5-15%% by Volume

Clean-up Thinner: MIL-T-81772, Type-II Epoxy Thinner

#### **CAUTION:**

Contains flammable solvents. Keep away from sparks and open flames. Use only grounded explosion proof equipment in accordance with the National Electric Code. Workmen must use nonferrous tools, wear non-conductive and non-sparking shoes in areas where explosion hazards exits. In confined areas, workmen must wear fresh airline respirators, protective clothing and gloves. Avoid contact with skin, breathing of vapor or spray mist ingestion. Keep out of reach of children.

#### **NON-WARRANTY:**

The technical data listed herein has been compiled for your convenience and guidance, and is based upon our experience and knowledge. However, since we have no control over the use of this information or of this product, no warranty, expressed or implied, is intended or given. Simco Coatings, Inc., assumes no responsibility whatsoever for coverage, performance, or any other damages, including injuries resulting from use of this information or of products recommended herein.

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