

STEELZ™ ZR

Zinc-Rich Rust Inhibitive Primer



PRODUCT DESCRIPTION

STEELZ™ ZR Metal Primer is a unique two component, Moisture Cured Polyurethane Zinc Rich Primer that can be applied over dry abrasive blasted or power tool cleaned steel substrates. This surface tolerant zinc filled Primer has excellent adhesion over sound, tightly adherent rusty steel surfaces. STEELZ™ ZR Metal Primer provides galvanic protection to carbon steel surfaces and its resistance to “creeping, undercutting, and blistering” is far superior to Epoxy Primers. STEELZ™ ZR Primer’s fast cure properties allow recoating the same day.

PRODUCT FEATURES

1. Excellent “wetting out” and adhesion to sound, rusty steel.
2. Fast recoating, within 4 hours at 75°F.
3. Cures down to 25°F on dry surfaces.
4. “Open” recoat window with proper cleaning.
5. Passed 1,500 hours in salt spray cabinet.
6. Used as a primer for Epoxy Coatings
7. Maybe applied up to 90% humidity.
8. Accepts high heat, up to 300°F dry.
9. Provides “galvanic” steel protection.
10. Excellent as field touch-up coat for inorganic Zinc Primers

TECHNICAL DATA

COLORS: Gray

FINISH: Low sheen

WEIGHT SOLIDS: 82% ± 2%

VOLUME SOLIDS: 52% ± 2%

COVERAGE (Theoretical): 832 sq. ft. @ 1 mils DFT

RECOMMENDED THICKNESS: 2.5 - 3.5 mils DFT
(235 – 350 sq ft/gal)

MIXING RATIO: Two component – Zinc Dust & Liquid
(mix entire content of the 1 gal Kit)

INDUCTION TIME: None

THINNING: Up to 5% with SA-50

POT LIFE: 8 hrs maximum depending on
Relative Humidity and temperature

RECOAT TIME: **Min.:** At 75°F and 50% R.H. 4 hrs.
MAX: 24 hrs. at 75°F and 50%

APPLICATION: Roll, brush or spray

APPLICATION TEMPERATURE: 35°F to 120°F

DRY SERVICE TEMPERATURE: Up to 300°F

SHELF LIFE: 1 year when stored inside @ 50°F-90°F

PACKAGING: 1 gallon kit

V.O.C.: 3.5 lbs/gal (420 grams/liter)

CLEAN UP: S-74 Thinner

PRODUCT USES

STEELZ™ ZR provides outstanding galvanic and barrier protection for carbon steel substrates. It can be applied over abrasive blasted or power tool cleaned steel to provide extraordinary Zinc cathodic protection under high performing chemical resistant epoxies. Excellent as a Primer in chemical plants, refineries, pulp and paper mills, power plants, waste and water treatment plants, electric generating stations, fertilizer plants, food processing, tank exteriors, structural steel, offshore platforms, pipe lines, material handling equipment, bridges, pharmaceutical plants, ore processing operations, marine installations and in many other applications.

SURFACE PREPARATION

Steel: For best results, sand blast to a SSPC-SP10 “Near White” blast or SSPC-SP6 “commercial” blast finish. Where blasting is not appropriate, remove all loose rust and mill scale by power wire brushing or hand tool cleaning. Metal surfaces should have a minimum anchor profile of one mil (.001”). Round off sharp edges and rough welds. Remove weld spatter and burrs. Surface must be clean and free of any grease, dirt, oil, salts, ice, water droplets and any other foreign material. For spray it is important.

MIXING INSTRUCTIONS

Mix as supplied. Do not split up kits. Use a separate container to mix both components. Start by slowly sifting Zinc Dust into liquid base making sure any lumps are broken up. Thoroughly blend materials together using a slow speed explosion proof variable speed drill with Jiffy Mixer. Pass mixed material through a 35-50 mesh screen before using. Keep under slow agitation while applying the material.



NOTE: Always wear protective gloves, safety glasses and clothing while mixing and applying STEELZ™ ZR. Do not get on skin. STEELZ™ ZR is difficult to remove.

APPLICATION PROCEDURE

AIRLESS SPRAY	GRACO	CONVENTIONAL SPRAY	BINKS
Gun	206-718	Gun	18 or 62
Pump	30:1	Fluid Cap	66
Tip Range	.017" - .025"	Air Cap	63 PB
Atomizing Pressure	2400 – 3000 psi	Atomizing Pressure	40 – 50 psi
Manifold Filter	60 mesh	Hose	3/8" – 1/2"

Brush – use pure bristle brush **Roller** – 3/8" phenolic core

When spraying, use a 50% overlapping crosshatch pattern to minimize the occurrence of pinholes. Do not apply to surfaces below 25°F or above 120°F. Do not apply over dew or frost.

CURE TIME @ 50% HUMIDITY

TEMPERATURE	TACK FREE	MINIMUM RECOAT	MAXIMUM RECOAT
90°F	1-2 hours	2-3 hours	16 hours
75°F	2-3 hours	4-5 hours	24 hours
45°F	6-8 hours	10-16 hours	48 hours

Times may be longer for thickness above 2.5 dry mils. Curing time varies with surface temperature, air movement, humidity, and film thickness. For safety and proper product curing, good ventilation is necessary when painting indoors or in confined areas. Primer surface must be thoroughly cleaned to remove any and all surface contamination and zinc salts. A test patch may be desired to insure proper adhesion.

LIMITATIONS

1. Do not apply over frost, wet, or damp surfaces.
2. Not recommended as tank lining for constant immersion.
3. Partially used containers must be reclosed tightly to prevent moisture in air from reacting with material and forming a tough skin.

V.O.C.

Unthinned
3.50 lbs/GL
(420 grams/liter)

Thinned 5%
3.68 lbs/GL
(441 grams/liter)

CLEAN UP

Clean up immediately with S-74 Thinner. Remove from skin while still wet. Scrub skin with soap and detergent.

CAUTIONS

STEELZ™ ZR is flammable. Keep away from all sources of ignition during mixing application and cure. Contains Aromatic Polyisocyanates and aromatic solvents. Proper ventilation is necessary when painting indoors or confined areas. Vapors and spray mist may cause eye/skin irritation as well as allergic reactions. Always wear protective clothing, goggles, impervious gloves and use NIOSH approved respirators. This product is sold without warranty as to performance expressed or implied. Users are urged to make their own tests to determine the suitability for their particular conditions.

**SEE SAFETY DATA SHEET FOR FULL SAFETY PRECAUTIONS. FOR PROFESSIONAL AND INDUSTRIAL USE ONLY.
KEEP AWAY FROM CHILDREN. NOT FOR RESIDENTIAL USE.**