



GalvaShield ZR 2100

Product Description

GalvaShield ZR 2100 is a two-component zinc-rich epoxy primer designed to provide outstanding cathodic protection and long-term corrosion resistance for steel structures exposed to aggressive industrial, marine, and offshore environments. The high metallic zinc content ensures sacrificial protection of steel surfaces, significantly extending the service life of protective coating systems. The coating is engineered as a primary anti-corrosive primer for steel structures and is compatible with a wide range of epoxy intermediate coats and polyurethane topcoats.

Product uses:

- Structural steel
- Oil & gas facilities
- Petrochemical plants
- Offshore platforms
- Bridges and infrastructure
- Storage tanks
- Pipelines
- Power plants
- Industrial facilities
- Marine steel structures

Properties

- Excellent cathodic (sacrificial) protection
- Very high zinc dust content
- Outstanding corrosion resistance
- Excellent adhesion to blast-cleaned steel
- Fast curing characteristics
- Excellent mechanical strength
- Suitable for severe industrial and marine exposure
- Compatible with epoxy and polyurethane systems
- Long-term durability in aggressive environments

TECHNICAL PROPERTIES

<i>Appearance/Color</i>	Semi flat / Metallic Gray
<i>Density:</i>	2.30 ± 0.10 kg/L
<i>Zinc Content (Dry Film):</i>	≥ 80% by Weight
<i>Volume solids %:</i>	60 ± 2%
<i>Theoretical spreading rate:</i>	7.5 m ² /ltr / 3.25 m ² /kg (80micron DFT)
<i>Recommended DFT:</i> <i>(Dry Film thickness)</i>	50-80 micron
<i>Flash Point:</i>	> 25°C. /77°F
<i>VOC:</i>	< 280 g/L
<i>Heat Resistance (Dry) (°C):</i>	• Continuous Service: 120°C • Intermittent Exposure: 150°C
<i>Surface dry:</i>	20 Minutes(s) 23°C/73.4°F 50% R.H
<i>Touch Dry:</i>	1 hour 23°C/73.4°F 50% R.H
<i>Full dry:</i>	8 hours (23°C and 50 % R.H.)



Recoating Time: 4 hours 23°C/73.4°F 50% R.H.
Full cure time: 7 days (23°C and 50 % R.H.)
Application temperature: +8 °C/46.4° F and +35 °C/ 95°F
Min. cure temperature: +10°C/50°F

Application Details

Mixing Ratio: Component A: 19– Component B: 1 (By weight)
Pot life: 6 Hours @ 25°C
Application method: Airless Spray Preferred
Brush For small areas and repairs
Roller: Not recommended
Thinner: Epoxy Thinner
Thinner Amount: 5 % for airless spray
Nozzle Size: 0.017" – 0.021"
Spray Pressure: 180 – 250 bar

Surface Preparation:

Carbon Steel

For optimum performance, surfaces must be clean, dry, and free from oil, grease, dirt, rust, mill scale, and other contaminants.

Abrasive Blast Cleaning:

- ISO 8501-1 Sa 2½

Surface Profile:

- 40 – 75 µm

Maximum surface contamination:

- Dust Rating: ISO 8502-3 Class 2
- Chloride contamination shall be minimized.

PRECEDING COAT:

Nothing

Recommended Coating Systems:

Heavy Duty Industrial System:

- 1- Primer: GalvaShield ZR 2100 (60 micron)
- 2- Middle coat: Steel Guard HB 1100 (150 micron)
- 3- Top coat: Tophane PU 55700 (60 micron)

Total System Thickness: 270 micron

Offshore / Marine System

- 1- Primer: GalvaShield ZR 2100 (75 micron)
- 2- Middle coat: Steel Guard HB 1100 (175 micron)
- 3- Middle coat : Topxy Enamel 415 (125 micron)
- 4- Top coat: Tophane PU 55700 (60 micron)

Total System Thickness: 435 micron



Chemical Resistance

Excellent resistance to:

- Fresh water
- Sea water
- Industrial atmosphere
- Humidity
- Splash and spill of petroleum products
- Mild acids and alkalis

Shelf life & Storage:

12 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.

Safety:

For information and precautions on the safe handling, transportation storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

Mixing:

Before mixing with the curing agent, stir the base thoroughly in order to prevent any possible settling after storage. After mixing it is equally important to maintain stirring to keep the wet paint as a Homogeneous mixture.

Legal Notice:

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