



PRITHVI ALUSHIELD EP

Category: Two-Component High Build Epoxy Aluminum Primer

1. PRODUCT DESCRIPTION

PRITHVI ALUSHIELD EP is a two-component high build epoxy coating to give Aluminum content in dry film. It is highly tough and abrasion resistant and has increased weather resistance designed for offering superior performance in highly corrosive chemical & coastal environment. It is also called cold galvanizing.

2. RECOMMENDED USES / APPLICATIONS

- Fertilizer plants
- Refineries
- Chemical plants
- Tanks & equipment
- Pipelines
- Structural steel
- Aluminum Parts

3. KEY FEATURES & BENEFITS

- Easy to apply via airless spray, conventional spray, brush or roller
- Can be used as a primer coat
- Very high resistance to the permeability of water, moisture, oxygen and other atmospheric pollutants
- High resistance to abrasion and mechanical damage when applied on blast-cleaned steel
- Imparts cathodic protection to the base metal
- No deleterious effect on normal cutting and welding operations

4. PHYSICAL & CHEMICAL PROPERTIES

Colour	Light Grey
Finish	Matt
Mixing Ratio (Part A : Part B)	1 : 1 by volume — two-pack, cold cured
Volume Solids	85% ± 5%
Specific Gravity	1.30 – 1.70 kg/lit
Dry Film Thickness (DFT)	110 – 130 microns dry 140 – 160 microns wet



Coverage	100 – 120 sq ft/lit per coat
Salt Spray Test	120 microns – passes 2000 hrs (testing under progress)
Scratch Hardness (2.50 kg load)	Passes

5. POT LIFE (BY TEMPERATURE)

10°C (50°F)	15°C (59°F)	25°C (77°F)	40°C (104°F)
12 hours	10 hours	4 hours	3 hours

6. DRYING TIME (@ 25°C)

Surface Dry	1 – 3 hrs
Tack Free Time	2 – 4 hrs
Hard Dry	5 – 10 hrs
Fully Cured	5 days

7. APPLICATION DETAILS

Application Method	Airless Spray, Conventional Spray, Brush, Roller
Recommended Thinner	Epoxy Thinner (as recommended)
Application Temperature & Humidity	10°C – 50°C & RH below 90%
Over Coating Interval	Min: Overnight Max: 5 Days
Film Build per Coat	Apply 5 mils wet, yielding approx. 3.1 mils dry per coat
Brush	China bristle
Roller	Solvent-resistant roller cover, 3/8" pile, smooth to medium; prewash roller cover to remove loose fibres prior to use
Airless Spray – Nozzle Tip	17 – 23 (inch/1000)
Airless Spray – Minimum Pressure at Nozzle	150 bar / 2100 psi
Conventional Spray	Thin the material as required for application viscosity & apply at a pressure of 3.5 – 4.5 kg



8. MIXING PROCEDURE

- Material is supplied in two containers as a unit. Always mix a complete unit in the proportions supplied. Once mixed, it must be used within the specified pot life.
- Agitate Base (Part A) with a power agitator.
- Combine the entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with a power agitator. Use within the stipulated pot life period.

9. SURFACE PREPARATION

Paint only clean, dry surfaces. Remove all grease, oil, wax, or other foreign material using cleaning tools or brushing. Blast clean to a minimum of Sa 2½. Special care must be taken to remove flux and spatter. Welds should be ground back to avoid pockets where corrosion can occur. Cleaned areas should be coated before corrosion restarts.

10. STORAGE & HANDLING

Storage Life: 6 months in a sealed container at normal temperature.

11. SAFETY INSTRUCTIONS

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given on this sheet, the Material Safety Data Sheet (MSDS) and the container(s), and should not be used without reference to the MSDS. All work involving the application and use of this product should be performed in compliance with all relevant national Health, Safety & Environmental standards and regulations. In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation. If in doubt regarding the suitability of use of this product, consult Prithvi Coatings' technical team for further advice.

DISCLAIMER

The information contained in this Technical Data Sheet is provided in good faith and is based on Prithvi Coatings' current knowledge and testing believed to be reliable. It is intended as a general guide only and does not constitute a warranty of performance, as actual results may vary depending on application conditions, substrate, and equipment beyond our control. Users should conduct their own trials to confirm suitability for their specific purpose prior to full-scale use. Prithvi Coatings reserves the right to amend this data without prior notice as products are continually reviewed and improved. Please ensure you are referring to the most current version of this document.