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BIO-TEC

WATER BASED

CATALYZED EPOXY PRIMER

PRODUCT DESCRIPTION

Bio-tec Water Based Catalyzed Epoxy Primer is a two component, adhesion promoting, rust inhibitive primer formulated for high performance protection. It provides high performance corrosion resistance plus the water borne coating advantages of low VOC, no solvent reduction, easy clean-up, low odour and application method flexibility (airless spray, brush and roll).

USES

For use as a field or shop applied coating as part of a system to be topcoated with Bio-tec Water Borne Epoxy or Water Borne Acrylic Coatings.

- o Steel
- o Aluminium
- o Masonry
- o Storage Tanks
- o Pipe Racks
- o Refineries
- o Galvanized
- o Zinc Rich Coatings
- o Processing Equipment
- o Structural Steel
- o Power Plants
- o Manufacturing Equipment

PERFORMANCE INFORMATION

Advanced adhesion
Excellent corrosion resistance
Impact and abrasion resistant
Flash rust/early rust resistant
Application safety; low odour, non-flammable
Outstanding early moisture resistance

PHYSICAL PROPERTIES

Abrasion resistance..... 137mg
(ASTM D4060, CS-17 wheel, 1,000 cycles, 1kg.,
Taber Abraser)
Direct impact resistance140 in lbs
(ASTM G14)
Dry heat resistance.....121oC
(ASTM D2485)
Elcometer adhesion.....600psi
(ASTM D4541)
Exterior durability.....Excellent
Flexibility.....Passes
(ASTM D1737, 180o bend, 2" mandrel)
Moisture condensation resistance.....Excellent
(ASTM D2247, 38oC, 750 hours)
Pencil hardness (ASTM D3363).....2H
Salt fog resistance.....Excellent
(ASTM B117, 750 hours)
Thermal shock (ASTM D2246).....Passes

RESISTANCE GUIDE: (Resistance to fumes, splash and spillage-not immersion ASTM D3912)

Acid salt solutions.....MODERATE
Aliphatic hydrocarbon solvents.....SEVERE
Alkalies.....MODERATE
Alkali salt solutions.....MODERATE
Aromatic hydrocarbon solvents.....LIGHT
Chlorinated Solvents.....NOT RECOMMENDED
Fresh water & salt water.....SEVERE
Glycol ethers, alcohols,
Formaldehyde.....MODERATE
Inorganic acids.....MODERATE

Oils(cutting vegetable lubricating).....SEVERE
 Organic acids.....MODERATE
 Oxygenated solvents.....LIGHTCHARACTERISTICS
 Color/Finish: Off-White/
 Matt

Curing Mechanism: Crosslink polymerisation
 Drying Schedule: (temp & humidity dependent)

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 50% RH @ 8 mils wet:

	@13oC	@25oC	@49oC
To Touch:	1.5 hrs	30 mins	20 mins
Tack Free:	3 hrs	60 mins	45 mins
To Recoat:	24hrs	24 hrs	24 hrs
To Cure:	30 days	10 days	7 days
Flash Point:	>95o C (Pensky Martens Closed Cup)		

Number of Components:

2(4:1 mix by volume, A to B)

Packaging: 1ltr and a 5ltr

Pot Life: @ 13oC.....36 hours
 @ 25oC.....24 hours
 @ 49oC.....12 hours

Maximum DFT/coat: 125 microns (Airless Spray)

Recommended Spreading Rate:

8 sq mt/ltr
 (theoretical, no loss)

125 microns wet

50 microns dry

Shelf Life: 36 months minimum @ 25oC

Volume Solids:(catalyzed).....40%+/-2%

Weight Solids:(catalyzed).....51%+/-2%

SG:(catalysed).....1.238+/-0.02bs/gal

“Sweat-In” Time:

@25-50oC.....2 hours
 @15oC.....4hours

SURFACE PREPARATION

Interior Plastered Walls and Wood:- Ensure all surfaces are clean, dry and sound. If powdery or very uneven for porosity, treat with Water Based Stabilising Solution.

Prime with Bio-tec Water Based Epoxy Primer thinned 5% with water. Topcoat with 2 coats of Bio-tec Water Based Epoxy Finish.

NB. We recommend filling is carried out prior to priming. If filling after the Prime Coat use high quality ready mixed filler as some powdered fillers remain powdery over a sealed surface.

Drywall (plaster board):- Fill cracks and nail holes with exterior grade filler/spackle and sand smooth. Remove all sanding dust. Paint as per plaster above.

Concrete Block and Masonry:- Surface temperatures must be at least 13oC before painting. All masonry must be free of moisture, dirt, oil, masonry dust and mortar. Poured, troweled or tilt-up concrete, plaster, mortar etc. should be cured for at least 30 days at 25oC. Form release compounds and curing membranes must be removed by brush blasting. Paint as per plaster above.

Iron and Steel:- Minimum preparation is power tool clean per SSPC-SP3. Best results are obtained using commercial blast cleaning per SSPC-SP6.

Prime with one coat Bio-tec Water Based Epoxy Primer unthinned followed by two coats of Bio-tec Water Based Epoxy Finish

Aluminium:- Remove all oil, grease, dirt etc. by solvent cleaning as per SSPC-SP1.
Paint as per steel above.

Galvanised:- Solvent Clean as per SSPC-SP1 and apply etch primer E61G520.
Paint as per steel above. Previously Painted Surfaces: If in sound condition, clean the surface of all foreign material.

Smooth, hard or glossy coatings/surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling, or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Note: Do not use on floors.