Product Finishes

CC-A34

KEM AQUA® 90P Water Reducible Primer

Gray E61A510
Catalyst V66V515

DESCRIPTION

Kem Aqua® 90P Water Reducible Primer is a waterborne 2K Epoxy primer providing excellent adhesion and corrosion resistance at low dry film thickness without the use of chromate pigments. It is especially suited for use under 2K Water borne Topcoats and 2K Urethane Enamels.

Advantages:

- Admixed VOC* <1.3 lb/gal, 150 g/L less water and exempt solvents
- Excellent corrosion resistance
- Fast Drying
- Excellent chemical resistance
- Free of chromate pigments
- Compatible with a wide range of topcoats, including:
  Polane® G Plus
  Polane® HS Plus
  Fast Production Enamel

*VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations.

An Environmental Data Sheet is available from your local Sherwin-Williams facility or at www.paintdocs.com.

CHARACTERISTICS

Gloss: 8 - 25 units (60°)

Volume Solids (As packaged):
Part A 51 ± 1%
Part B V66V515 30 ± 1%

Volume Solids (mixed): 47 ± 1%
Viscosity (As Packaged):
Part A 65 - 85 KU
Part B 100 + KU
Mixed 17 - 35 seconds Zahn #4
Recommended film thickness:
Mils Wet 2.5 - 3.5
Mils Dry 1.2 - 1.6
Spreading Rate (no application loss)
680 sq ft/gal 1.0 mils DFT
mixed/reduced 10%
Drying (77°F, 50% RH @ 1.5 mils DFT):
To Touch: 20 - 40 minutes
Tack Free: 45 - 75 minutes
To Handle: 2 - 3 Hours
Force Dry: 30 minutes at 140°F
To Recoat: After 30 minutes, but before 3 weeks
Good air movement and humidity control are necessary for proper drying of water reducible coatings.
Flash Point: Part A 200°F Pensky-Martens Closed Cup
Part B 135°F Pensky-Martens Closed Cup

Mixing Ratio (By Volume):
4 parts E61A510
1 part V66V515
Induction Time: 20 Minutes
Pot Life: 4 hours
Package Life: 1 year, unopened

Air Quality Data:

- Non-photochemically reactive
- Volatile Organic Compounds (VOC) Theoretical as packaged, maximum, less water and exempt solvents:
  Part A: 0.62 lb/gal, 74 g/L
  Part B: 3.66 lb/gal, 439 g/L
  Mixed: 1.23 lb/gal, 147 g/L
- Volatile Hazardous Air Pollutants (VHAPS) as packaged, no reportable VHAPS

SPECIFICATIONS

General: Substrate should be free of grease, oil, dirt, fingerprints, drawing compounds, any contamination, and surface passivation treatments to ensure optimum adhesion and coating performance properties. Consult Metal Preparation Brochure CC-T1 for additional details.

Steel or Iron: Remove rust, mill scale, and oxidation products. For best results, treat the surface with a proprietary surface chemical treatment of zinc or iron phosphate to improve corrosion protection.

Testing: The information, data, and recommendations set forth in this Product Data Sheet are based upon test results believed to be reliable. However, due to the wide variety of substrates, substrate properties, surface preparation methods, equipment and tools, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.

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APPLICATION

Typical Setups

May be applied by:
Conventional Spray
Airless Spray
Air Assisted Airless
HVLP

Reduction: As needed up to 10% with deionized water.

Conventional Spray:
Air Pressure.....55 psi
Fluid Pressure .....8 – 10 psi
Reducer……Deionized Water
Reduction Rate... as needed up to 10%

Airless Spray:
Pressure .....1800 – 2400 psi
Tip .....0.13 – 0.15"
Reducer.....Deionized Water
Reduction Rate... as needed up to 10%

Air Assisted Airless:
Air Assist Pressure .....15 – 30 psi
Fluid Pressure……..1500-1800 psi
Cap/Tip.....0.13 – 0.15”
Reducer.....Deionized Water
Reduction Rate... as needed up to 10%

HVLP:
Air Pressure at the cap..... 10 psi max
Fluid Pressure ..... 6 – 8 psi
Tip ..... 0.55 – 0.70
Reducer.....Deionized Water
Reduction Rate... as needed up to 10%

Cleanup:
Clean tools/equipment immediately after use with Deionized Water If paint starts to dry clean with MIBK..
Flush equipment with solvent to prevent rusting.

Follow manufacturer's safety recommendations when using any solvent.

ADDITIONAL INFORMATION

- Minimum Paint temperature 65°F (18° C) for application.
- Maximum paint temperature for application 110°F(43°C)
- Minimum air and surface temperature 50°F (10°C)
- Maximum air and surface temperature 120°F(49°C)
- Maximum relative humidity 80%, high humidity can affect dry times
- Substrate and air temperature must be 5°F (3°C) above the dew point.
- Must have good air movement
- Protect from freezing
- Clean application equipment thoroughly before and after use

Performance Tests
Substrate: :24 Gauge Bonderite® 1000 P99X steel panels
Primer: 1.5 mils DFT, Kem Aqua® 90P Water Reducible Primer
Cure 7 Days air Dry 77°F:

Salt Spray Test
ASTM B117.....500 hours
1/16” creepage maximum, no blisters
Humidity
ASTM D2247, 100°F, 100% RH...500 hours
No Blisters or field corrosion
Conical Mandrel
ASTM D633.....passes 1/8" mandrel
Impact Resistance, Direct
ASTM D2794..... 140 in lb
Impact Resistance, Reverse
ASTM D2794.....5 in lb
Pencil Hardness
ASTM D3363.....2H

Primed panels (as above) topcoated with 1.5 mils dft Polane G Plus, cured 14 days
Salt Spray Test
ASTM B117.....1500 hours
no blisters, no adhesion loss

CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION ONLY

Thoroughly review product label and Safety Data Sheet (SDS) for safety information and cautions prior to using this product.

To obtain the most current version of the Environmental Data Sheet (EDS), Product Data Sheet (PDS), or Safety Data Sheet (SDS) please visit your local Sherwin-Williams facility or www.paintdocs.com.

Please direct any questions or comments to your local Sherwin-Williams facility.

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