

847 Series

847 SERIES ARMOUR SHIELD®

Aliphatic Acrylic Urethane

General Properties

The Armour Shield® 847 line of coatings are tightly crosslinked interpenetrating polymer networks of acrylic urethanes. They are very low HAPs, high performance two component, aliphatic urethanes that provide superior gloss and color retention, excellent chemical resistance, outstanding abrasion resistance and a very high gloss (wet look) finish. They are available in white, colored bases, and custom colors. Armour Shield® 847 series are two component products with base 847 Series A and converter 84700B supplied in separate containers.

Recommended Uses

For application to commercial transportation, aircraft, farm machinery, electrical transformers, oilfield drilling and service equipment, industrial & process equipment, exteriors of storage tanks and structural steel. The Armour Shield® 847 series may also used as a chemical resistant, gloss retentive finish over intermediate epoxy and zinc rich primer systems.

Product Information

GENERIC TYPE

Aliphatic Acrylic Urethane

PIGMENT TYPE

Lightfast Pigmentation

COLOR

White, Black, Factory-Mixed and Custom Colors

BASES

84700 White, 84701 Deep, 84703 Clear, 84704 Jet Black 84750 S.G. White, 84751 S. G. Deep, 84753 S. G. Clear

FINISH

Very High Gloss - Wet Look 50 Series - Semi Gloss

AVERAGE VOLUME SOLIDS

51% (Mixed)

AVERAGE WEIGHT SOLIDS

64% (Mixed)

RECOMMENDED FILM THICKNESS

Wet: 4 - 6 mils Dry: 2 - 3 mils

See your Cloverdale Representative for project recommendations.

THEORETICAL COVERAGE

795-820 ft²/cal @1 mil (25 microns) DFT 19.5-20.1 m²/L @ 1 mil (25 microns) DFT Actual coverage will vary depending on substrate and application methods.

MIX RATIO

4 parts 847 Series A: 1 part 84700B

INDUCTION TIME

No Induction required

POT LIFE

2 hours at 24°C (75°F) (Less at higher temperatures)

VISCOSITY

25-35 seconds Zahn #2 (mixed)

TEMPERATURE RESISTANCE (DRY)

93°C (200°F) Continuous 120°C (250°F) Intermittent

V.O.C. (MIXED)

Less than 340 g/L (2.83 lbs/gal)

MAXIMUM THINNING TO OBTAIN V.O.C.

OF 420 g/L (3.5 LBS/GAL) 14% using C760-2

THINNER

C-760-1 Slow Evaporating; Low HAPs C-760-2 Medium Evaporating; HAPs Free

C-760-5 HAPs Free Slow

ACCELERATOR

A-66 Urethane Accelerator

Methods of Application

AIRLESS SPRAY 1200 - 2000psi fluid pressure with tip sizes .009" - .013" or equivalent

H.V.L.P 10 - 20 psi pot pressure, <29 psi atomizing air, Nozzle set 1.4 - 1.8

CONVENTIONAL 10 - 20 psi pot pressure, 40 - 65 psi atomizing air, Nozzle set 1.4 - 1.8

AIR ASSIST AIRLESS 700 - 1200 psi fluid pressure, 40 - 70 psi atomizing pressure, .009 - .013 tip size

Drying Time - Temperature, Relative Humidity, and Film Thickness will affect dry and re-coat times.

Note: Overcoat Interval times reflect times for best appearance.

Substrate
Temperature

Touch Dry
Hard Dry
Minimum
Maximum
Normal

25 °C (77°F)

1½ - 2 hours

2 - 2½ hours

1½ hours

3 days

2 - 4 hours

Recommended Primer

847 Series

STEEL

83021 ClovaPrime 21/ 86850 Series DuraPrime/ Also as a finish coat over select Cloverdale Hi-Build Epoxy or Zinc Rich Primer Systems/Hi Build Epoxy

CONCRETE
GALVANIZED
ALUMINUM

Consult with your Cloverdale Representative for project recommendations

83021 ClovaPrime 21 83021 ClovaPrime 21

Surface Preparation

Surface to be coated must be clean, dry and free from surface contamination. On ferrous metals a suitable primer should be used. Epoxy primers must be over-coated within the maximum overcoat window or the surface must be sanded to provide mechanical adhesion.

Typical Resistance (Non-Immersion)

 WEATHER
 EXCELLENT
 SALT WATER
 EXCELLENT
 ACIDS
 EXCELLENT

 MOISTURE
 EXCELLENT
 FRESH WATER
 EXCELLENT
 ALKALIS
 VERY GOOD

SOLVENTS EXCELLENT ABRASION EXCELLENT OIL EXCELLENT

Limitations

After Armour Shield 847 Series has cured for more than 3 days, the surface will require sanding for adhesion purposes for subsequent coats. For best results apply when the substrate temperature is above 10°C (50°F), and at a minimum of 3°C (5°F) above the dew point. Coating application should not proceed when the relative humidity is above 85%.

Mixing Instructions

Mix base A and curing agent B separately with good agitation. Add converter or curing agent B to base component and mix thoroughly until homogenous. Carefully maintain water traps in all air lines. Humid conditions can lead to condensation during the curing cycle, resulting in loss of gloss. Use of accelerator will shorten pot life. Refer to accelerator data sheet for recommended levels.

Safety Precautions

This product is for industrial use only. Refer to Safety Data Sheet for proper health and safety information.

Storage and Handling

FLASH POINT 847 Series A component: -10C. 84700B: 27C

PRODUCT WEIGHT 84700A - 1.285 Kg/Lt; 84700B - 1.050; 84704A - 1.045 Kg/Lt (container extra)

STORAGE Cool, dry, secure location. See your Cloverdale Paint Representative.

PACKAGE SIZE 1 gallon kit: 3.02 L 847 Series A, 0.76 L 84700B 5 gallon kit: 15.12 L 847 Series A, 3.78 L 84700B

Some package sizes or colors may be by special order only. Please check with your Cloverdale Representative when ordering.

Warranty Disclaimer

Cloverdale Paint manufactures quality products. In the event that this product is defective or in any way unsuitable for the application for which it is sold, Cloverdale Paint Inc. will replace the product free of charge. The warranty provided by this data sheet is the only waranty or guarantee of quality made in respect of this product by Cloverdale Paint Inc. By purchasing this product the customer accepts this warranty in lieu of all others, and waives all claims to any other remedy arising from any warranty or guarantee of quality, whether such warranty or guarantee of quality was made expressly to the customer or implied by any applicable law.



Cloverdale Paint Inc.

400 - 2630 Croyden Drive, Surrey, British Columbia, Canada, V3Z 6T1 Web Site: www.cloverdalepaint.com Email: helpdesk@cloverdalepaint.com Phone: 604 596 6261 Fax: 604 597 2677

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