

DESCRIPTION

Fusion Primer is a very fast drying and thin sol-gel based fusion primer that functions as an intercoat adhesion primer or direct to substrate primer. Fusion Primer creates a molecular bridge between a coating and the substrate, chemically fusing substrate and top coat. Fusion Primer is very compatible with many surfaces, and many coatings, though water-based coatings are not compatible as top coats. When used on concrete substrates, as long as concrete is clean and free of bond breakers such as oils, greases, etc., no surface profile is needed to achieve strong chemical bond to surface.

FEATURES

- Removes the need to sand or mechanically abrade substrates or coatings before top coating.
- Provides strong bonding to the hard to bond or low/no profile surfaces
- 90 minute overcoat window. If window is missed, run a screen or light abrasion and reapply
- Provides Covalent bonding at a molecular level and becomes one with the surface they are applied to and create a superior barrier
- Can be used on almost any substrate – concrete, steel, stones, tiles, glass
- Penetrate the surface of the substrate
- UV stable and virtually invisible

TYPICAL USES

- Serves as adhesion layer between coating and substrate, or between two coatings
- Can be applied on Painted or unpainted iron; aluminum, copper and other metals; hot rolled steel, cold rolled steel, stainless steel; powder coated and galvanized surfaces; concrete, wood, rubber, plastic, fiberglass and glass.

COLORS

Clear to slight straw yellow liquid

PACKAGING

1 quarts, 1 gallon buckets, 5 gallon pails, 55 gallon drums, 275 gallon totes

COVERAGE

Calculation for theoretical coverage: 300 – 400 Ft²/gal @ Recommended spread rate 4 – 5 mils Wet, 0.4 – 0.9 mils Dry

STORAGE

Twelve months in factory delivered, unopened drums. Store on pallets and keep away from extreme heat, freezing, and moisture. Store at temperatures between 50 °F and 80 °F (10 °C and 27 °C).

MIXING

Ready to use. There is no need for mixing or diluting.

TECHNICAL DATA (All values @ 77 °F / 25 °C)	US	Metric
Volatile organic compounds (ASTM D2369)	< 0.27 lb./gal	< 32 gm/ liter
Theoretical coverage	300 – 400 Ft ² /gal @ 0.4-0.9 mils DFT	22-37 m ² /liter @ 10-23 microns
Specific Gravity of materials (ASTM D792)	7.3 lbs./gal	0.87 kg/ liter
Shelf life @ 77 °F /25 °C	12 months	12 months
Flash point - pensky martin	<77 °F	< 25 °C
Application Temperature	45 – 104 °F	7 – 40 °C
PROCESSING PROPERTIES (Under standard lab conditions)		
Touch Dry	60 minutes	
Dry Through	120 minutes	
Recoat interval	5-90 minutes	
<i>Properties and values are highly dependent on equipment, spray gun, mix chamber temperature, pressure and related parameters. Values are slightly different for clear. Variations are possible and expected.</i>		

SURFACE PREPARATION

Make sure the surface is clean, dry, in sound condition, and free of any contaminants including oil, dust, grease, dirt, and silicone sealers. Apply Fusion Primer in an ambient temperature between 7-40 degrees Celsius, 90% RH or less, and, if applying outdoors, make sure that there will be no rain or dew for 5 hours after completing the coating process. Wind may affect the quality of the finish and it may be necessary to erect a windshield. Fusion Primer may be sprayed, rolled or brushed. Best results and greater coverage are achieved when it is sprayed.

APPLICATION:

- Spraying:

Use a portable alcohol and acetone-proof sprayer with a grey or red tip or and HVLP spray gun with a 1.0 size tip and the pressure set at approximately 25 psi. Spray test-patterns until you achieve an elongated pattern 20-25 cm long and 5 cm wide in the middle with sufficient fluid to cover but not to puddle. Work with a waste bucket so that you start and finish your spraying in the bucket and avoid drips on the surface being coated. When you are satisfied with the spray pattern apply one coat to the surface in a cross-hatch pattern to provide sufficient even coverage.

- Rolling:

Use an ultra-smooth high-density foam roller and apply Fusion Primer as quickly as possible in a cross-hatch pattern. Do not press down on the roller.

- Brushing:

Use a good-quality brush and choose a size suitable for the area to be coated. Apply Fusion Primer in a cross-hatch pattern. Do not over-work the coating. Keep the lid on the tin to stop evaporation.

EQUIPMENT CLEAN UP

After application, equipment should be cleaned by pouring a solvent (acetone, methyl acetate, TBA, or similar) into device and spraying out to "flush out" any remaining product from the lines. After one flush out, repeat for 2 total flushes.

LIMITATIONS

As treated and untreated surfaces look similar, finish work on an obvious point such as a corner or mark where you have stopped. When you start work again you can apply over the dry edge without sanding.

WARRANTIES AND DISCLAIMERS

Advanced Resins Coating Systems International, a Nevada, USA Corporation warrants that this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product is dependent upon the proper mixture and application of the components by the applicator. Advanced Resins Coating Systems has no role in the application of the finished polymer other than to manufacture and supply its two components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of plural component equipment and application of plural component materials. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by Advanced Resins Coating Systems International and executed under seal by a company officer.