
DESCRIPTION

Premera FP1 Fusion Primer is a single component, spray on sol-gel based fusion primer that functions as an intercoat adhesion primer or direct to substrate primer. FP1 Fusion Primer creates a molecular bridge between a coating and the substrate, chemically fusing substrate and top coat. FP1 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 grinding or surface profile is needed to achieve strong chemical bond to surface.

FEATURES

- Removes the need to grind, sand or profile 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 chemical bonding to substrate and becomes one with the surface they are applied to
- Can be used on porous and non-porous substrates – concrete, stones, tile, porcelain, glass
- Single component, spray down primer
- UV stable and virtually invisible

TYPICAL USES

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

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 to eighteen 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)	< 1.25 lb./gal	< 150 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	90 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

PREPARATION

Protect all surfaces not designated for coating application. Do not apply to surfaces that are frozen, dirty, or have standing water, grease, oil or other contaminants. Intended surfaces must be clean, dry and absorbent. Confirm surface absorbency with a light water spray - intended surface should wet uniformly. If surface does not wet uniformly, use a recommended cleaner, auto scrubber, power washer or other process to remove surface contaminants. Surface must be clean and dry prior to application.

NEW CONCRETE - Remove all dust, debris and other contaminants from the surface. If concrete is less than 28 days old, PRREMERA HLT must be used prior to Fusion Primer. With PREMERA HLT, new concrete can be coated with PREMERA products 96 hours after pour. Refer to PREMERA HLT application instructions and TDS for how to install properly.

EXISTING CONCRETE - Intended surface must be clean, dry and structurally sound. Remove any and all contaminants including bond breakers, surface grease and oil, dust and construction debris. For larger surface areas, use an autoscrubber with an appropriate cleaner. Surface must be dry prior to application of PREMERA products.

SURFACE & AIR TEMPERATURE - 45 - 105F (7 - 40C)

EQUIPMENT - For horizontal substrates, use an acetone-proof pump sprayer with a cone tip. For vertical/upright substrates, use an HVLP spray gun.

STORAGE & HANDLING - Store in a cool, dry place <80F. Always seal container after dispensing. Published shelf life assumes upright storage of factory-sealed containers in a dry place <80F.



APPLICATION

Before use, read Preparation, Hazard and Precautionary Statements. ALWAYS TEST using the equipment and procedures prior to starting the job.

TYPICAL COVERAGE RATES

Smooth Concrete	500-600	Concrete Block	200-250
Broom Finish	250-300	Concrete Pavers	250-300
Diamond Grind	150-250	Concrete Slab	250-300

*Coverage rates will vary based on substrate porosity and application method.

HORIZONTAL SURFACES - Ensure surface is free of any dust, debris and other contaminants. Solvent wipe prior to application of Fusion Primer. If solvent wipe pad appears black/very dirty after wipe, surface is not clean and must be cleaned with an auto-scrubber and an appropriate cleaner/degreaser. Once surface is clean and dry, Fusion Primer application may begin. Use an acetone proof pump sprayer, ex. Swissmex, with a cone tip. Keep spray tip 18 inches off the ground and apply product slowly in a circular motion, similar to how a stain is sprayed on concrete. On broom finished, troweled, ground or non-polished concrete, spray at least two coats wet on wet, 3-4 mils WFT each. Apply with a 50% overlap, keeping a wet edge while applying. Observe how the concrete absorbs the first coat for at least 5 minutes. If the surface still looks the same as before the Fusion Primer application and not wet/saturated, additional coats are required in the dry, non-enhanced areas. Concrete must be saturated for Fusion Primer to work properly.

APPLICATION:

Once concrete is saturated, wait at least 15 minutes for Fusion Primer to become tacky. Once tacky, Fusion Primer may be over coated with non-water based coatings. Do not apply over coat until Fusion Primer is tacky. Failure to wait until tacky will result in fish eyes, over coat shrinking away from coating perimeter, and poor finish of top coat. Once Fusion Primer is tacky, you have 90 minutes to apply over coat. If overcoat window is missed, screen floor and reapply Fusion Primer.

VERTICAL SURFACES - Ensure surface is free of any dust, debris and other contaminants. Once surface is clean and dry, Fusion Primer application may begin. Use an HVLP spray gun set to 25 PSI, with a 1 inch by 8 inch elongated, vertical spray pattern. On broom finished, troweled, or non-polished concrete, spray at least two coats wet on wet, 3-4 mils WFT each at least 3 minutes apart to observe how concrete absorbs Fusion Primer. Apply with a 50% overlap and, keeping a wet edge while applying. Observe how the concrete absorbs the first coat. If the surface still looks the same as before the Fusion Primer application and not wet/saturated, additional coats are required in the dry, non-enhanced areas. Concrete must be saturated and feel tacky after Fusion Primer application for Fusion Primer to work properly.

RETURN TO SERVICE TIME

Refer to over coat manufacturer's return to service/dry times.
Wait at least 3 days before exposing to vehicular traffic.

HAZARD STATEMENTS

IN CASE OF FIRE: Use dry chemical, alcohol foam or carbon dioxide extinguisher. Water spray may be used to cool, dilute or disperse vapors. Do not release runoff to drains or waterways. Vapors can flow along surfaces to distant ignition source and flash back. Contact with strong oxidizers may cause fire. Closed containers may explode when exposed to extreme heat. This material may produce a floating fire hazards sensitive to static discharge.

ACCIDENTAL RELEASE MEASURES: Dike area to prevent spreading. Ventilate area of leak or spill. Remove all sources of ignition. Collect liquid in an appropriate container or inert absorbent material. Do no flush to sewer. Dispose of chemical waste in accordance with current local, state and federal regulations.

OTHER PRECAUTIONS: Store in cool (below 100F) ventilated area, away from children, food stuffs, strong oxidizers, heat sparks, flames and all sources of ignition. Keep container tightly sealed when not in use. Do not apply heat, cut, drill, and grind or weld on or near this container. Use respiratory protection when misting or spraying. Avoid contact

with skin and eyes. Avoid breathing vapor and spray mist. Provide ventilation with positive fresh air exhaust in work area. OSHA 1910.134 and ANSI Z88.2. Avoid skin contact. Wear butyl rubber gloves and impervious protective clothing. Do not wear contact lenses. Chemical safety goggles or splash shields recommended. Do not eat or drink when using this product. Wash hands thoroughly after handling. Dispose of in accordance with local, state, federal and international regulations.

EQUIPMENT CLEAN UP

CLEAN UP - Clean tools and flush out spray equipment with acetone within 15 minutes after application. Once product cures, it can not be removed from spray equipment. 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

Premera Coating Systems, a Texas, 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 use and application of the product by the applicator. Premera Coating Systems has no role in the application of the finished polymer other than to manufacture and supply its components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of spray equipment and application of Premera Coatings materials. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by Premera Coating Systems and executed under seal by a company officer. Standard product warranty for 1 year from manufacture date.

