
DESCRIPTION

Premera CS1 is a single component, spray down sol-gel based clear sealer designed to protect concrete, terrazzo, and tile and by creating a high strength, quartz mineral barrier. Premera CS1 chemically fuses with substrates and does not require a substrate profile, eliminating grinding or sanding prior to application. Premera CS1 self levels allowing applicators to spray down CS1 and walk away without backrolling. Premera CS1 provides superior resistance to harsh chemicals, abrasion, mold, mildew, moss, chlorides & salt spray, acid rain, UV damage, oxidation, animal & bird waste damage, gum, and graffiti. Uniquely, CS1 also creates a smooth, yet non-slip, grippy safe walking surface without also creating a difficult to maintain rough surface. CS1 does not require Premera Quick Seal as a pre-seal for porous surfaces prior to application.

FEATURES

- Single component, spray down, no backroll, self leveling clear top coat
- Does not require substrate profile, eliminating grinding or sanding prior to application
- Excellent abrasion and scratch resistance
- Excellent impact resistance
- Excellent chemical resistance
- UV resistant
- Comes in gloss, satin and matte finish
- Easy clean coating greatly reduces maintenance costs

TYPICAL USES

- Can be applied directly to densified, polished concrete, terrazzo, tile and porous surfaces, and ferrous metals including: coated/painted iron & steel or direct to stainless steel & galvanized steel; Non-Ferrous metals including aluminum, copper and bronze (raw, powder coated, painted or primed). Concrete walls, structures, floors, masonry pavers, unglazed tile, bricks and cement block.
- Moisture, corrosion/rust, oxidation, galvanic corrosion, acid rain, food and beverage acids, fuels and oils, wind drag, dirt build up, ice buildup and animal and bird waste damage. UV stable.

COLORS

Clear to slight amber to rose (depending on temp and humidity) always dries clear. Gloss, satin or matte finish.

PACKAGING

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

COVERAGE

Calculation for theoretical coverage: 250 – 450 Ft² /gal on Concrete @ Recommended spread rate 3 – 4 mils Wet,
1 – 1.5 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)	< 0.83 lb./gal	< 100 gm/ liter
Theoretical coverage	250 – 450 Ft2 /gal @ 1.0-1.5 mils DFT	9-14 m²/liter @ 25-38 microns
Specific Gravity of materials (ASTM D792)	7.36 lbs./gal	0.88 kg/ liter
Shelf life @ 77 °F /25 °C	12-18 Months	12-18 Months
Flash point - pensky martin closed cup	15 °F	-9 °C
Application Temperature	45 – 105 °F	7 – 40 °C
Adhesion to 800 Grit Polished Concrete (ASTM 4541)	1200+ PSI Cohesive Concrete Failure	
Accelerated UV Exposure 1000 hrs. (ASTM G154)	dE: <0.5	
Thermal Cycling (ASTM 6944) 50C - 4 Hours Immersion @ 25C - 4 Hours -29C - 16 Hours	No Effect	
PROCESSING PROPERTIES (Under standard lab conditions)		
	Non-Catalyzed	Catalyzed
Touch Dry	1-2 hours	1-2 hours
Dry Through	3-5 hours	2-3 hours
Recoat interval	0-60 minutes	0-60 minutes
To be walked on	Min 6-8 hours	2-4 hours
To be exposed to vehicular traffic	Min 3 days	4- 8 hours
Full Cure	5-7 Days	3-5 days
Properties and values are highly dependent on equipment, spray gun, pressure and related parameters. Variations are possible and expected.		

SURFACE 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, 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, PREMERA EasyMVB must be used prior to PREMERA CS1. With PREMERA EasyMVB, new concrete can be coated with PREMERA products 4 hours after EasyMVB application. Without EasyMVB, concrete must cure 28 days prior to CS1 application. Refer to PREMERA EasyMVB 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.

METAL - 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. Existing corrosion must be removed prior to CS1 application. Cold rolled steel must be coated with an anti corrosion primer prior to CS1 application. Apply CS1 direct to non-ferrous metals, galvanized and stainless steel.

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

EQUIPMENT - For horizontal substrates, use an acetone proof pump sprayer with a cone tip. For vertical or 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. Install a field mockup to ensure quality, and substrate compatibility. The field sample will be used as the standard for color, texture, and floor finish.

TYPICAL COVERAGE RATES

Existing Concrete - 300-400* square feet/gallon

Densified, 800+ grit Polished Concrete - 600 - 800* square feet/gallon

Metal - 600 - 800 square feet/gallon

Pavers / Very Porous Surfaces – 250 – 350 square feet/gallon

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

HORIZONTAL SURFACES - While container is closed, gently shake to avoid air entrapment and air bubbles in finish. Ensure surface is free of any dust, debris and other contaminants. Dust may settle back onto floor between surface preparation and application and may affect finish of CS1. Wipe floors immediately prior to applying CS1 to ensure dust is removed. Once surface is clean and dry, CS1 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. Spray one coat, 3-4 mils WFT keeping a wet edge, with the goal to create a wet, reflective film as you are spraying. Only one coat is applied, it is very important to take your

time - GO SLOW TO LET IT FLOW.

Overhead light or a spotter is helpful to gauge wet film thickness as product is applied.

VERTICAL SURFACES - Ensure surface is free of any dust, debris and other contaminants. Once surface is clean and dry, CS1 application may begin. Use an HVLP spray gun set to 25 PSI, with a 1 inch by 8 inch elongated, vertical spray pattern. Spray one coat 2-3 mils WFT in a cross hatch pattern, left-to-right and top-to-bottom being one coat, keeping a wet edge while applying.

EQUIPMENT 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

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.

CAUTION: If using spray application method in an enclosed space, make certain to tent off the area being sprayed with plastic tarps to avoid spray dust from traveling and contaminating other surfaces with over spray dust. Tented and enclosed areas always require to be positively supplied with fresh air and have ventilated exhaust to outside using fans. Never spray near any open flame or any possible source of ignition such as pilot light, or anything that may spark, as this may cause ignition and explosion of the fumes and vapors. (In enclosed areas, make sure to have an observer watching the applicator for any signs of physical distress.)

Wash surface with a low-pressure hose or wipe down with damp rag to remove dirt and spills. Although CS1 is highly scratch resistant, it is not scratch- proof. Do not use abrasive cleansers or abrasive scouring pads. If an area gets damaged or is mechanically abraded, lightly sand the area with 400 grit sandpaper and reapply touch up to CS1. If substrate is damaged, make necessary repairs first, then re-apply CS1.

WARRANTIES AND DISCLAIMERS

Manufacturer guarantees Premera CS1 to be defect free. Product proven to be defective will be replaced in like quantity by the manufacturer within 5 years of date of purchase with proof of purchase, provided it has been applied according to the instructions on container and data sheet along with other related guidelines posted on website. This warranty only extends to the owner of the property upon which the product is applied and is non-transferable. This warranty does not cover wear and tear. This warranty is for manufactured defects only. Any warranty claim must be made in writing and sent to seller with supporting materials and access to the property for inspection and testing as requested by seller. Seller will thereafter provide 100% replacement product for product found to be defective for the first 3 years then the product replacement will be prorated every year until year 5. This warranty is given in lieu of all other warranties, expressed or implied, including any warranty of merchantability or fitness for a particular purpose. The remedy stated herein is an exclusive remedy and Seller shall not be responsible for any other damages, including labor or any incidental, consequential, special or punitive damages, whether based on breach of express or implied warranty, negligence, strict liability or other legal theory.