

Micro-Seal®

Silane/Siloxane with MICRO-LOK™

TECHNICAL DATA SHEET

Silane / Siloxane water repellent provides protection from mold, mildew, and efflorescence. Clear long lasting formula designed to seal surfaces.



Product Codes

LC	6 oz → 1 Gal	CR-0359
	32 oz → 5 Gal	CR-0360
	1 Gal → 10 Gal	CR-0701
	5 Gal → 50 Gal	CR-0705
Ready to Use	1 Gal	CR-0356
	5 Gal	CR-0357
	55 Gal	CR-0358

Benefits

- Penetrates deep – use on commercial buildings, retaining walls, and other projects.
- Prevents growth of mold and mildew
- Resists hot-tire pick up - great for concrete parking structures
- Stain resistant to oil, gas and anti-freeze
- Clean tire marks easily
- Great winterizing agent – Protects surface from icing and salt infiltration
- Controls efflorescence on concrete, brick, block, and stucco surfaces

Description

Micro-Seal® is a solvent-free, 100% active solid, silane/ siloxane repellent. Micro-Seal self-emulsifies to form a high-performance and deep-penetrating, alkali-resistant water-repellent emulsion. When applied, Micro-Seal® forms a long chain water-repellent barrier deep within the brick and masonry surface. This hydrophobic barrier repels water, yet remains highly vapor-permeable and allows moisture to escape. Micro-Seal® performance is not affected by weathering, UV light, or wind-driven rain. Micro-Seal® uses MICRO-LOK™ to create a micro-molecular chemical and mechanical bond between the water-repellent chemicals and the substrate. Micro-Seal® penetrates deep into porous brick and masonry surfaces to provide long-lasting and virtually indestructible water-repellent protection that is not affected by weather or sunlight. It helps prevent spalling, and cracking caused by freeze/thaw cycles. Helps prevent chloride ion intrusion and efflorescence.

Features

- Does not change the surface look or texture
- Mold and mildew inhibitor
- Protects against weathering and UV light
- V.O.C. compliant
- Contains no known carcinogens
- Breathable – does not trap moisture
- Can be used in cold temperature applications
- Will NOT yellow or turn cloudy
- Helps resist freeze/thaw damage
- Protects against wind driven rain
- UV Stable

Coverage Rates* (Theoretical)

*Extremely porous surfaces may require multiple coats.

Substrate		Sq Ft / Gallon
CMU	Precision Block	60-70
	Split Face	50-70
	Scored/ Fluted**	65-80
	Lightweight	40-55
Clay Brick		125-150
Stucco		100-150
Dense Masonry Surfaces		125-150
Wood		150-200
Clay Block		50-60
EFIS		80-120
Concrete Curing		300-400
Concrete		125-150

**Use of fluted, scored block or raked joints will increase surface areas by 20%-30% or more, with decreased coverage rates. Take into consideration this increased surface area when determining material requirements.

Rainguard® Micro-Seal®



Dilution

Add clean water to concentrate ONLY
Standard dilution is 9:1 for the 1 gallon concentrate. The following dilution rules apply only to CR-0701 and CR-0705:

Ratio:	Description:
4:1	Extra strength for surfaces that are highly porous.
9:1	Standard strength ideal for most porous surfaces. Extra porous surfaces may require a second coat.
14:1	Ideal for very dense surfaces. Also ideal for dustproofing applications.

If product is Ready To Use - DO NOT DILUTE

Surface Preparation

Before application, the surface should be clean and dry with no oils, dirt, debris, or minerals such as efflorescence, lime and calcium. These stains, along with others, will prevent proper penetration of Micro-Seal to sufficiently seal for the warranty period.

We recommend using our Restore'N'Prep product as a pre-treatment to clean masonry surfaces. Once clean, allow the surface to fully dry before sealing or applying a top-coat (See Restore-N-Prep TDS for details).

How to Apply

1. Micro-Seal® should be applied using a hand pumped garden sprayer (do not atomize) or low-pressure airless spray equipment.
2. If using airless spray equipment we recommend a spray tip size of .035 to .051. Spray head should be held 8 to 12 inches from the surface.
3. Apply enough product so that it runs down the wall approximately 6-12 inches below the point of application.
4. Apply material following coverage rate previously listed (pg. 1).
5. Avoid application in windy weather.
6. Trigger gun off at the end of each pass to avoid using excessive materials.
7. Multiple coats may be applied. Whitening or yellowing will not occur.

PLEASE NOTE:

Elevation Sealing - We recommend sealing the entire elevation of porous surfaces with Micro-Seal® before applying our VandlGuard® products. This ensures the wall has a consistent look during rains, and moisture will not get behind the VandlGuard® Anti-Graffiti Coating in the future.

Concrete Curing

Micro-Seal® acts as a curing aid by regulating the moisture content of the concrete while curing. It prevents quick water evaporation which alleviates cracking while the concrete is drying. It is also breathable to let moisture escape over time.

Apply Micro-Seal® at a rate of 300-400 sq. ft. / gallon to "wet" the fresh concrete. This is typically done the day after pouring the concrete, and after form release agents, oils and other products are properly prepared to receive a curing aid.

Precautions & Limitations

Use material in a well-ventilated area. Protect the work of other trades. Protect shrubbery and other plants with drop cloths. Protect automobiles and all other areas not to be coated from overspray. Remove overspray from any windows, automobiles, metal, etc. as soon as possible should it occur. To prevent permanent staining, clean spills or leaks in a timely manner.

All surfaces to be coated should be clean of any dirt and grime, efflorescence, lime run, form oils and release agents, grease, mud, excess mortar, and mold and mildew, etc. All cracks should be pointed or caulked. All voids, beeholes, masonry surface defects and openings such as conduits, pipes, drains, door frames, vents, air conditioner openings, electrical openings, control joints, or any dissimilar materials should be repaired using urethane or other approved patching.

Do not apply to surfaces if moisture content is greater than 25% as measured with an electronic moisture meter. Do not apply materials in climates where freezing temperatures have existed prior to application. Allow adequate time for surfaces to thaw. Establish that air, surface, and material temperatures are above 40°F (4.4°C) and at least 5°F above the dew point prior to painting. Do not apply at temperatures below 40°F when temperatures are expected to drop below 40°F within 48 hours of application. Do not apply if rain, snow, or lower temperatures are expected within 48 hours. Do not apply if relative humidity is greater than 90%.

Clear water repellents are not designed to waterproof horizontal masonry surfaces such as ledges, sills, cornices and parapet walls, etc.

Store materials in a well-protected area at 45°-90°F. Avoid freezing temperatures, direct sunlight, & moisture. Keep away from heat sources.



Warranty

The information contained herein is offered in good faith and is believed to be accurate. To be eligible for a Rainguard Warranty the following must occur:

1. A site visit must be conducted by an employee or agent of Rainguard and a Field Inspection Report completed.
2. A Warranty Application must be fully completed by the applicator.
3. Field Inspection Report, Warranty Application, and a copy of the distributor's invoice must be submitted to and approved by Rainguard.

Micro-Seal is Eligible For A 10 Year Warranty

Apply 1 coat at the appropriate coverage rates.

If you have further questions about coverage rates please call your RainguardPro Representative, or call (888) 765-7070. Apply for a warranty by visiting: RainguardPro.com/warranty-pre-registration or calling (888) 765-7070 to request a paper copy.

This material is only warranted when applied in accordance with the manufacturer's guidelines and warranty procedures. Without adherence to these specific guidelines, no expressed or implied warranty of this product is given. Please contact RainguardPro for additional information.

Test Panel

Always apply material to a mock wall or test panel. Test wall or actual surface area to determine acceptable color, surface porosity, application rates and methods before starting application.

SEE TEST DATA ON NEXT PAGE >>

Rainguard®[®] Micro-Seal®[®]

Approvals & Qualifications

LAUSD - OESH	Approved
USGBC - LEED Points	Up to 3 Points
LEED (New Construction)	Approved
LEED (New Schools/CHPS)	Approved
CARB	Approved
SCAQMD	Approved

Test Data

ASTM C666	2200 Cycles - No effect
ASTM C672 100 Cycles	No Mass Loss, No Scaling
ASTM D2243	Do Not Freeze
ASTM G154 2,500 HOURS	No Loss in Repellency
ASTM C672/C672M	No Scaling, 100 Cycles Treated Concrete
Wind Driven Rain	ASTM E-514-86., 98.7% Leak Red
Water Pen Fed Spec	SS-W-110C, 75% Min Req, 96.8 Leak Red Chloride Ion Intr
Salt Pounding NCHRP	No. 244 Series IV - 95% Red No. 244 Series II - 87% Red
Chloride Ion Absorption	No. 244 Series II - 87%
Water Abs CMU ASTM C140-75	98.6% Effective
Water Vapor Trans ASTM D-1653-71	100% Vapor Perm
Water Repellency ASTM C67-87	98.6% Effective
Weathering ASTM G-53	3,500 Hours - No Change
Surface Burning ASTM E84	Flame Spread 0, Smoke Development 0

Technical Data

Material Type	Silane/Siloxane
Active Content	100%
Volume Solids	40 or 80%(Depends on Dilution)
Color of Material	Milky White
Odor	Slight Odor
V.O.C.	0 g/L V.O.C. Compliant
Flash Point	Non-Flammable
pH Value	6
Viscosity	9.6 Seconds No. 4 Ford Cup
Weight	Approximately 8.7 lbs./Gal.
Surface Dry/Recoat	Approx 1 Hour
Full Chemical Cure	5 to 7 days

