

Micro-Seal® HD

Silane/Siloxane with MICRO-LOK™

TECHNICAL DATA SHEET

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



Rainguard® Micro-Seal® HD

Product Codes

LC	32 oz → 5 Gal	CR-2405
	1 Gal → 10 Gal	CR-2401
Ready to Use	1 Gal	CR-0401
	5 Gal	CR-0405

Description

Micro-Seal® HD is a solvent-free, 100% active solid, silane/ siloxane repellent. Micro-Seal® HD self-emulsifies to form a high-performance and deep-penetrating, alkali-resistant water-repellent emulsion. When applied, Micro-Seal® HD 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® HD performance is not affected by weathering, UV light, or wind-driven rain. Micro-Seal® HD uses MICRO-LOK™ to create a micro-molecular chemical and mechanical bond between the water-repellent chemicals and the substrate. Micro-Seal® HD 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.

Dilution

Add clean water to concentrate ONLY
If product is Ready To Use - DO NOT DILUTE

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.

Features

- 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
- UV Stable

Benefits

- Penetrates deep – Perfect for use on brick porches, chimneys, walkways
- Prevents growth of mold and mildew
- Stain resistant to oil, gas and anti-freeze
- Great winterizing agent – Protects bricks from icing and salt infiltration
- Controls efflorescence on brick, block, and stucco surfaces

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	

*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.



How to Apply

1. Micro-Seal® HD 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 a fog coat quickly followed by a flood coat that 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.

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%. (CONTINUED)

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.

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

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Test Data

ASTM C666	2200 Cycles - No effect
ASTM C672 100 Cycles	No Mass Loss, No Scaling
ASTM D2243	Do Not Freeze
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	80%
Color of Material	Milky White
Odor	Slight Odor
V.O.C.	30 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