

VandlGuard®

Single-Part Urethane Clear Coat™

TECHNICAL DATA SHEET



Tintable, Graffiti resistance, UV resistance and Stain resistance.

VandlGuard® CSI Reference

09 96 23 Finishes

*Standard warranty period is 5 years when applying one coat of VandlGuard® Urethane with the appropriate coverage rate. 10 year warranty is applicable when applying two coats of VandlGuard® Urethane with the appropriate coverage rate.

Description

VandlGuard® Single-Part Urethane is a clear single component, water-based, V.O.C. compliant Anti-Graffiti coating. It dries clear with the option of low gloss, high gloss, or matte finishes. The highly durable finish resists graffiti and staining while protecting the surface from natural outdoor elements.

Features & Benefits

- Single-Part - No Mixing Needed
- Highly Graffiti Resistant
- UV Resistant
- SCAQMD VOC Compliant
- Various Finishes Available
- Excellent Adhesion
- Great Chemical Resistance
- Exceptional Durability Against Abrasion
- Scaling Resistant, 100 cycles Pass
- 100% Vapor Permeable
- Surface dry for recoating, approx. 1 hour
- Full chemical cure, 72 hours

Approvals & Qualifications

Los Angeles Research Report	#RR 25060
USGBC - LEED Points	Up to 3 Points

ASTM D7089-06 Graffiti Removal Method

Product	Warranty	Trisodium Phosphate	High Pressure Wash	Graffiti Remover
Urethane	5/10 Year M&L	X	X	X

*M & L - Material & Labor Warranty

ASTM D6578/D6578M-13 Anti-Graffiti Cleanability Level

Product	Level 9. Detergent	Level 8. IPA	Level 7. Minera Spirits	Level 6. Xylene	Level 5. MEK
Urethane	X	X	X	X	X

Coverage Rate by Substrate (theoretical)

The coverage depends on the surface. Test the product on a small area of the substrate to estimate coverage and determine if a second coat is needed.

Substrate	Sq Ft/ Gallon
Smooth Surface	400
Rough / Porous Surface	275 - 300

The use of fluted, scored block, raked joints, sandblasted or etched surfaces will result in greater absorption and lower coverage rates, by up to 40%. Test these areas for the expected coverage rate before general application. Allow for this increased surface area when determining material requirements.

Surface Preparation

Prior to application, all surfaces shall 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 VandlGuard® Single-Part Urethane to sufficiently seal for the warranty period.

The use of Rainguard's Restore-N-Prep™ Concrete and Masonry Cleaner system is recommended as a pre-treatment to clean masonry surfaces. Once clean, allow the surface to fully dry before sealing or applying a top-coat (See the Restore-N-Prep™ TDS for details).

Restore-N-Prep™ CSI Reference

03 01 40 Concrete Finishes
03 10 30 Concrete Finishes
03 10 50 Concrete Finishes
04 01 20 Unit Masonry
04 01 40 Unit Masonry

Bare Surfaces

First apply 1 coat of Micro-Seal® Water Repellent by Rainguard® (required for warranted applications).

Existing Paint

Apply two coats of VandlGuard® Single-Part Urethane Clear Coat over high quality exterior paint systems for graffiti resistance.



Application Instructions

1. Apply using airless spray equipment, rolling, or brushing. Apply VandlGuard® Single-Part at the recommended coverage rates. If spraying apply in a fine mist, cross-hatched pattern to build up the wet coating.
2. As soon as the entire surface is coated, immediately repeat the process with a second pass.
3. After 4 hours, you can apply a second coat with the same application method above.

Application Data

TEMPERATURE:	40°F - 95°F (5°C-35°C)
RELATIVE HUMIDITY:	< 80%
AIRLESS SPRAY:	
PRESSURE	800-2,000 PSI
TIP	.415-.617
REDUCTION	N/A
BRUSH:	N/A
ROLLER COVER:	1/4"-3/4" NAP; SYNTHETIC

Graffiti Removal

Attend to any graffiti as soon as possible. The longer graffiti sits unattended, the harder removal becomes. Within the first couple of days a power wash will remove the graffiti. After that, VandlClean® Super may be required to completely remove graffiti. In the event VandlClean® Super is needed spray the graffiti with VandlClean® Super. Allow the product to sit for several seconds and follow up with a power wash to remove. Repeat as necessary. Depending on the graffiti intensity, more than one pass may be necessary.

Test Panel

Always apply VandlGuard® Single-Part Urethane onto a mock wall or test panel. Prior to coating previously sealed surfaces, test a small area for adhesion. Test wall or actual surface area to determine acceptable color, surface porosity, application rates and methods before starting general application.

Precautions

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. 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. If an acid etch or an acid stain has been applied to the surface, it must be thoroughly flushed to remove all residue and then allow to dry.

Do not apply on damp or moist surface as it will whiten and may cause delamination. Do not apply to surfaces if moisture content is greater than 25% as measured with an electronic moisture meter. Do not apply product 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 in temperatures below 40°F or above 100°F. Do not apply if rain, snow, or lower temperatures are expected within 48 hours. Do not apply if relative humidity is greater than 90%.

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

Shelf Life of this material is 6 months from the date of manufacture (see batch number for manufactured date).

Clean Up

Uncured material can be removed with a water. Cured material can only be removed mechanically. All empty containers must be disposed of according to local, state, and federal regulations.

Safe Handling

Use product only with adequate ventilation and/or an appropriate cartridge type respirator. Avoid contact with skin and wear protective gloves. Read the Safety Data Sheet before using.



Technical Data

V.O.C.	<50 g/L V.O.C. Compliant
Material Type	Polyurethane
Active Content	52%
Color of Material	Clear to Slightly Cloudy
Odor	Slight Ammonia Odor
Flash Point	Non-Flammable
pH Value	Approximately 7.5
Viscosity	9.6 Seconds No. 4 Ford Cup
Weight	Approximately 8.5 lbs./Gal.
Surface Dry/Recoat	Approx 1 Hour
Full Chemical Cure	72 Hours

Test Data

ASTM D-3960 VOC Levels	<50 g/L
ASTM E-514-86 Wind Driven Rain	98.7% Leak Red
Water Vapor Trans ASTM D-1653-71	100% Vapor Perm
Water Pen Fed Spec SS-W-110C	75% Min Req 96.8% Leak Red Chloride Ion
Salt Pounding NCHRP No. 244 Series IV No. 244 Series IV	95% Red 83% Red
Scaling Resistance ASTM C672/C672	100 Cycles - No Scaling
Exposure to deicing chemicals 100 Freeze Thaw Cycles	Visual Rating - 0
Water Abs CMU ASTM C140-75	98.6% Effective
ASTM G-53/G 154 Accelerated Weathering 8000 Hours	No blistering, chalking, gloss or color changes
ASTM C-1262 Freeze, Thaw Resistance 100 cycles	Cracking none; adhesion loss none
Surface Burning ASTM E84	Flame Spread 0, Smoke developed 0
ASTM D-638 - Elongation	150%
ASTM D-412 Tensile Strength	6150 PSI
ASTM D523 (Gloss)	90°
ASTM D523 (Matte)	3°-6°
Maximum scrub Cycles	135
ASTM B117 Salt Fog	3000 Hours/No Effect
ASTM D530 Hardness Pencil 2 weeks	2H
ASTM D412 Elongation	150%
ASTM D412 Tensile Strength	6050
ASTM D522 Mandrel Bend Test	No coating loss at 180° rotation
ASTM D968 Sand Abrasion Resistance	5-65 Liters
ASTM E96 Water Vapor Transmission	100% Vapor Perm



Chemical Resistance

IPA	No Effect after 5 Days
MEK	No Effect after 5 Days
Toluene	No Effect after 5 Days
50% Sodium Hydroxide	No Effect after 5 Days
75% Phosphoric Acid	No Effect after 5 Days
50% Sulfuric Acid	No Effect after 5 Days
Carboxylic Acid	No Effect after 5 Days
Aniline	Stain Only
37% Hydrochloric Acid	4 Hours Blister
NIT	72 Hours Blister
100% Acetic Acid	Failure

Warranties

Rainguard Brands, LLC guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. Rainguard Brands, LLC makes no other warranty, expressed or implied, and all warranties of merchantability and fitness for a particular purpose are hereby disclaimed. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product. Manufacturer shall not be liable for material used outside of its shelf life. For product dating, please refer to the batch number on the product or contact Rainguard Brands, LLC.

Surface conditions and application variables are out of the control of Rainguard Brands, LLC. As such, the applicator agrees to: Follow recommended application instructions, acknowledge limitations outlined in this technical data sheet, contact the manufacturer in the event there are any uncertainties, perform a test panel to confirm fit and finish before any general application. The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Rainguard Brands assumes no obligation or liability for use of this information. Contact manufacturer at 888-765-7070 before bidding to confirm warranty provisions and procedures.

SELLER'S LIABILITY UNDER THE SALE OF THIS PRODUCT IS LIMITED TO REPLACING DEFECTIVE PRODUCT. HOWEVER, IF SELLERS FAILS IN ITS ATTEMPT TO REPLACE THE DEFECTIVE PRODUCT, BUYER WILL BE ENTITLED TO A REFUND OF MONIES PAID TO SELLER UNDER THIS PRODUCT WARRANTY. SELLER IS NOT LIABLE FOR BUYER'S LOSS OF PROFITS, BUSINESS GOODWILL, OR OTHER CONSEQUENTIAL DAMAGES, DESPITE ANY FAILURE TO REPLACE THE PRODUCT. BUYER HAS ACCEPTED THIS RESTRICTION ON ITS RIGHT TO RECOVER CONSEQUENTIAL DAMAGES AS PART OF ITS BARGAIN WITH SELLER. BUYER REALIZES AND ACKNOWLEDGES THAT THE PRICE OF THE PRODUCT WOULD BE HIGHER IF SELLER WERE REQUIRED TO BE RESPONSIBLE FOR BUYER'S CONSEQUENTIAL DAMAGES."

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