



2-PART WATER BASED HIGH PERFORMANCE URETHANE

SEAL-KRETE® 2-Part High Performance Urethane is a premium two-component water based coating. Designed for interior and exterior applications, it provides an excellent chemical resistant, high gloss finish in a low VOC formula. It is available in light gray, dark gray and a clear that can be applied directly to many surfaces without the need of a primer, i.e., metal, concrete, wood, aluminum and galvanized metal. The material is NSF approved for use at USDA facilities of incidental food contact. SEAL-KRETE 2-Part High Performance Urethane meets the SCAQMD requirements of less than 50 g/l (EPA Method 24) and is widely used by food & beverage and pharmaceutical facilities on walls, floors, equipment and clean rooms, as well as amusement parks, refineries, power industry, storage tank exteriors, pipelines, wastewater facilities, commercial buildings and as an anti-graffiti system.

SURFACE PREP

Note: Proper surface prep is critical to product performance. The surface should be clean, dry, sound and free of dirt, dust, oil, wax and grease. You may need an oil stain remover such as SEAL-KRETE® OSR to lift stubborn oil stains.

BARE CONCRETE: Concrete must have cured a minimum of 30 days before application. Clean masonry substrates with an alkaline cleaner such as TSP (tri-sodium phosphate) to remove any laitance or solid contaminants using low or high pressure washer. Smooth surfaces (like garage, basement floors and carports) should be etched with SEAL-KRETE Clean-N-Etch (follow all label guidelines) to achieve the proper profile. Rinse thoroughly and let dry. For larger projects or where acid etching is not feasible, concrete surfaces can be prepared by mechanical abrasion - shot blasting, scarifying, diamond grinding or hydro blasting.

PREVIOUSLY SEALED/CURING AGENTS: Floors that have been previously sealed or have had a curing agent applied, must be chemically stripped or mechanically abraded (grinding, scarification or shot blasting). Follow with a general cleaning or etching as required. Rinse thoroughly and let dry.

PREVIOUSLY PAINTED SURFACES: Remove loose or peeling paint and degloss surface by sanding (150-200 grit sandpaper). Follow with a general cleaning with TSP (tri-sodium phosphate/alkaline cleaner). Rinse thoroughly and let dry. If previously painted surface is failing, full removal of previous coating is required. If the previous coating is sound, a test patch of SEAL-KRETE 2-Part High Performance Urethane is recommended to ensure adhesion.

WOOD: Sand new wood to remove any surface contaminant and to lower grain. Previously finished wood should be sanded to provide good adhesion. Test patches are recommended.

ANTI-GRAFFITI SYSTEM: Follow appropriate surface preparation noted above. Use two coats of SEAL-KRETE 2-Part High Performance Urethane.

STEEL: Remove all loose rust, dirt, grease or other contaminants per SSPC-SPI, SSPC-SP2, SSPC-SP3 (e.g. low or high pressure water cleaner).

ALUMINUM: Remove all oil, grease or soap film with an alkaline cleaner such as TSP (tri-sodium phosphate).

GALVANIZED METAL: Remove all oil, grease or soap film with an alkaline cleaner such as TSP (tri-sodium phosphate).

APPLICATION

Application Conditions: Temperature of the air, substrate and material is recommended to be between 50°F and 95°F. Relative humidity should not be above 80%. Spray equipment should be cleaned thoroughly before applying SEAL-KRETE 2-Part High Performance Urethane. If more than one kit (light or dark gray) is used, contact SEAL-KRETE Technical Services at 1-800-323-7357 for advice on intermixing procedures. Two Coats are recommended with a minimum of 6-8 hours dry time between coats.

EQUIPMENT:

Airless Spray: Unit: 2000-2400 psi Tip: .015 - .017 Hose: 1" to 3/8"

Air-Assist Sprayer: Unit: 500-620 psi Tip: .015 - .017

Conventional: DeVilbiss pressure pot with ± GA 503 gun and FF needle assembly with 777 air cap

Roller: Vertical Surfaces: 1" woven nap roller, Phenolic core
Horizontal Surfaces: 3/8" woven nap roller, Phenolic core

MIXING INSTRUCTIONS: Mix Part "A" by using a low speed drill motor and a "Jiffy" type mixer for 2 minutes. Add Part "B". Mix an additional 2 minutes. Mix only the amount of material that can be applied during the pot life. Do not aerate (incorporate bubbles into) the mix. The two parts will thicken as they are being mixed. After mixing, allow to sit for 2 minutes (induction time) before applying. After the 2 minutes, reduce the combined components to the desired viscosity with potable water. Recommended minimum reduction rate of 1 pint to maximum of 1 quart of potable water per gallon of material. When desired viscosity is achieved, apply immediately (pot life: 1.5 – 2 hours). **Note: Product must be thinned for proper curing and film build.**

Potable (Reducer) Water: Clean Tap Water

Vertical Surface: 1 pint
Horizontal Surface: 1 pint (light or dark grays)
Horizontal Surface: 1 quart (clear gloss only)

Coverage per Coat:

Actual Spread Rate: 250 to 400 sq. ft./gal, depending on porosity of substrate
Vertical Surfaces: Wet mils: 4.0 - 5.0
Dry mils: 2.4 - 3.0
Horizontal Surfaces: Wet mils: 6.0 - 8.0
Dry mils: 3.6 - 4.8

Application Viscosity: 65-75 KU catalyzed & reduced

DECORATIVE PAINT FLAKES: For a more decorative appearance, apply decorative paint flakes to final coat of **SEAL-KRETE 2-Part High Performance Urethane Light or Dark Gray Coatings**. Apply the material in 4' x 4' sections so that the decorative paint chips can easily be broadcast over the final coat. Allow to dry 24 hours. Apply one coat of **SEAL-KRETE 2-Part High Performance Urethane Clear** to lock in the paint flakes and facilitate cleaning.

PRODUCT CHARACTERISTICS

Finish: Gloss @ 60° Angle up to 95
Color: Clear, Light Gray, Dark Gray
VOC: <30 g/l
Shelf Life: Part A: 12 months; Part B: 12 months
Flashpoint: >185°F
Pot Life: 1.5 - 2 hours

Product	No.	Size	UPC Code	Case Bar Code	Case Size (L x W x H)	Case Size (cubic ft / lbs)	Case Qty	Pallet Qty
2-Part HP Urethane Clear Gloss Kit	221001	1 gallon	0 15944 22101 5	-	12.5 x 7.25 x 8.75	.46 / 11.12	1	75 cases
2-Part HP Urethane Lt. Gray Gloss Kit	222001	1 gallon	0 15944 22201 2	-	12.5 x 7.25 x 8.75	.46 / 12.25	1	75 cases
2-Part HP Urethane Dk. Gray Gloss Kit	223001	1 gallon	0 15944 22301 9	-	12.5 x 7.25 x 8.75	.46 / 11.05	1	75 cases

DRY TIME: Dry to touch in 4 hours (75° F/50% RH). Dry to recoat in 6-24 hours (Sanding required after 24 hours to achieve adequate profile). Dry to foot traffic in 24 hours. Dry to vehicular traffic in 5 days. For maximum abrasion and chemical resistance, a cure time of 7 days is recommended. Additional dry time is needed in cooler temperatures or when relative humidity is greater than 50%. Premature traffic could result in coating failure.

CLEAN-UP/DISPOSAL/STORAGE: Clean tools immediately with water or a 50/50 mixture of water and Isopropyl Alcohol. Dispose of container and contents in accordance with local laws and regulations. Keep from freezing.

LIMITATIONS: This product is not designed for immersion or any use where moisture can reach the underside of the coating. Do not apply to floors that have been treated with curing and parting compounds (unless completely removed) or substrates that are less than 30 days old. Do not use on vinyl, asphalt, glazed tile, paving brick, quarry tile, Mexican tile or similar materials.

MAINTENANCE: Important: Wait 30 days before rinsing or cleaning surface. Clean occasionally with a solution of soap and water or TSP (tri-sodium phosphate) and water. The surface can be spot cleaned with Formula 409 or Fantastik cleaners. If required, the substrate can also be scrubbed with a soft bristle brush or shop broom. Rinse with a garden hose or pressure washer (less than 1200 psi) held at least 18-inches from the surface, using a fan spray pattern.

WARNING: DO NOT TAKE INTERNALLY. HARMFUL IF INHALED. CAUSES IRRITATION. OVEREXPOSURE MAY CAUSE LUNG DAMAGE. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION. EFFECTS MAY BE PERMANENT. VAPOR AND SPRAY MIST HARMFUL. KEEP OUT OF REACH OF CHILDREN.

USE WITH ADEQUATE VENTILATION: To avoid breathing vapors and spray mist, open windows, doors or other means to ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness, increase fresh air. Respiratory Protection: None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator that is approved for use in isocyanate containing environments should be worn. Obtain professional advice before using. A dust mask does not provide protection against vapors. Avoid contact with eyes and skin. Wash thoroughly after handling. Prevent prolonged or repeated contact by using rubber or neoprene gloves.

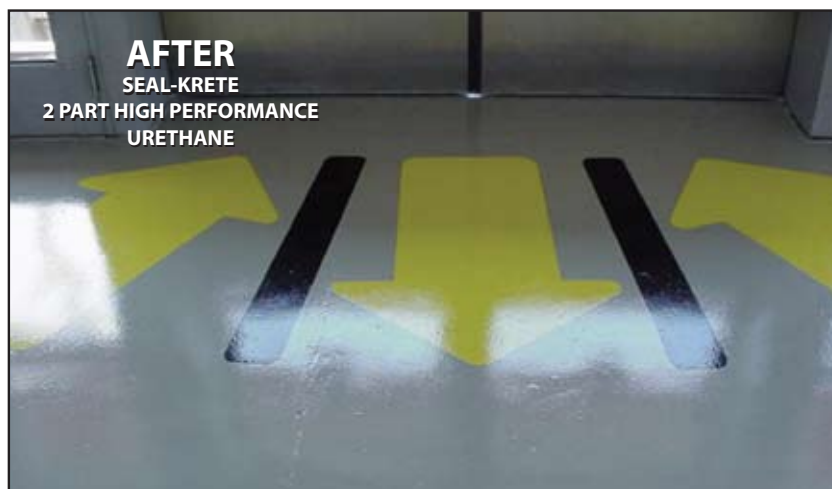
FIRST AID: If you experience difficulty breathing, leave the area to obtain fresh air. If continued difficulty occurs, get medical attention immediately. In case of eye contact, flush immediately with plenty of water for 15 minutes, and get medical attention. For skin contact, wash thoroughly with soap and water. For inhalation, remove affected person to fresh air. Provide oxygen if breathing is difficult. Ingestion: Do not induce vomiting. Get immediate medical attention.

SPILLS/LEAKS: Contain spill with inert absorbent material and dispose.

WARRANTY: Manufacturer/seller makes no warranty of any kind except that this product is free from defect and is of merchantable quality. Buyer remedy for breach of warranty is limited to replacement of product or refund of purchase price. Convenience Products will not be responsible for labor or the cost of labor for removal or application of any product.

TECHNICAL SUPPORT: For more information on surface prep or application guidelines, or to obtain a Material Safety Data Sheet, call 1-800-323-7357, M-F (8:00 am-5:00 pm, EST) or visit our website at www.seal-krete.com.

**Sanding or removing paint containing lead may be hazardous. For information contact the National Lead Information Center at 1-800-424-LEAD or www.epa.gov/lead.*



Summary of Independent Testing SEAL-KRETE HIGH PERFORMANCE 2- PART URETHANE

Test Description	ASTM	SK HP URETHANE 2 Component/Polyurethane
VOC Content	D3960	<30 g/l
Weight Solids	D2369	66%± 3%
Catalyzed & Reduced		
Volume Solids	D2697	Clear: 55%± 3% Clear
Pigmented: 64%± 3%		
Freeze/Thaw resistance	D2243	Passed 5 cycles
Heat Package Stability (Note 1)	Special	Passed
Hiding	D2805	4 mils = 0.98
Dry Times at 75 degrees F:	D1640	
To Touch		4 hours
To Recoat		6-8 hours
Foot Traffic		24 hours
Vehicular Traffic		5 days
Sag Resistance	D4400	6.0 mils wet
Pot Life at 75 degrees F	N/A	1.5 - 2 hours
Condensing humidity--1000 hours:	D2247	
Rusting		10 (none)
Blistering		10 (none)
Salt Fog--1000 hours:	B117	
Rusting		10 (none)
Blistering (Note 2)		# 6 medium
Scribe Undercutting (Note 3)		<0.5 mm
Salt Fog--5000 hours:	B117	Passed
Color Change (Note 4)		1.72
Gloss Change (Note 5)		-24.5
Abrasion Resistance (Taber)	D4060	20 mg loss
Pencil Hardness (Note 6):	D3363	
Gouge Hardness		4H
Scratch Hardness		H
Tape/Knife Adhesion	D3359	5B (no loss)
Tensile Adhesion (Note 7)	D4541	2473-2609 psi
Impact Resistance (Note 8)	D2794	20 in-lbs.
Flexibility (Conical Bend)	D522	
% Elongation (Note 9)		32%
Resistance to Cracking (Note 9)		< 1/8" diameter
Chalking Evaluation post QUV (Note 10)	D4214	10 (no effect)
Special Thermal Cycling (Note 11)	Special	No effect
Thermal Shock	D2246	16 cycles - passed
Water Vapor Transmission Testing (Note 12)	E96	2.43 perms

Note 1: Heated to 120 degrees F for two days and then cooled to ambient.

Note 2: #6 medium = 1/8 to 1/16 inch blisters in medium quantities.

Note 3: Indicates depth of rusting under the coating/result is a low value.

Note 4: Passes based on SSPC Paint 36 standards for color change of less than 2.0.

Note 5: Passes based on SSPC Paint 36 standards for gloss change of less than 30.

Note 6: Hardness Scale: Softer to Harder: 6B-5B-4B-3B-2B-B-HB-F-H-2H-3H-4H-5H-6H.

Note 7: The amount of force needed to delaminate coating from substrate.

Note 8: Approximate height at which standard weighted object caused deforming of film.

Note 9: Results indicate significant flexibility/did not crack.

Note 10: Special testing for color fading from chalking.

Note 11: Subject to 16 hrs freeze and 8 hrs at 120 F per days 5 days per week for 6 weeks. Tested adhesion.

Note 12: Reported Average Water Permeance of 2.43 perms; Average Vapor Permeability at 0.01 perm/inch.

Summary of Independent Testing SEAL-KRETE HIGH PERFORMANCE 2- PART URETHANE

Test Description	ASTM 2 Component/Polyurethane	SK HP URETHANE
10% Hydrochloric Acid (Muriatic Acid)	D1308	No effect
10% Sulfuric		No effect
36% Hydrochloric Acid (Muriatic Acid)		Not Resistant
36% Phosphoric Acid		Not Resistant
37% Sulfuric Acid (battery acid)		No effect
Acetone		No effect
Alcohols		No effect
Animal Urine		No effect
Anti-Freeze		No effect
Betadine (iodine skin cleanser)		No effect
Bleach		No effect
Brake Fluid		Not Resistant
Calcium Chloride		No effect
De-Icing Salts		No effect
Detergents		No effect
Gasoline		No effect
Greases		No effect
Hydraulic Fluid		No effect
Isopropyl Alcohol		No effect
MEK		No effect
Motor Oil		No effect
Mustard		No effect
Orange Juice		No effect
Skydrol JP-4		No effect
Sodium Hydroxide		No effect
Toluene		No effect
Xylol		No effect
Water		No effect
Water with Detergent		No effect
Windshield Wiper Fluid		No effect

Note 13: 24 hour spot exposure under a watch glass.