



## HYDROTHANE

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### Seal. Protect. Rejoice.

For locations that need durable protection against chemicals and require low odor, **KRETUS® HYDROTHANE** is the perfect solution. This water-based polyurethane is available in both gloss and low gloss finishes and is ideal for indoor spaces like schools and healthcare facilities. It's also great for protecting waterproof decking, decorative concrete overlays, and grind-and-seal installations. With HYDROTHANE, you can rest easy knowing that your space is safe, healthy, and protected.

#### ADVANTAGES

- Meets USDA, FDA, EPA, and SCAQMD Standards
- Eligible for LEED Points
- Adhesion to Mechanically Prepared Concrete, Wood, Metal, Non-glazed Tiles
- Antibacterial
- Can Be Applied at or Above 40°F
- High Impact Resistance
- High Traffic and Hot Tire Resistance
- Low Maintenance
- Low Odor
- Low VOC (<100 g/L)
- Scratch Resistance
- UV Resistance
- Waterproofing

#### SUGGESTED USES AND APPLICATION AREAS

- Top Coat
- Horizontal and Vertical Surfaces
- Schools, Healthcare, Government, Institutional, and Residential Spaces

#### KRETUS® SYSTEMS

- Color Splash
- Top Shelf® Metallic (as a low-odor option)
- Walls and Wall Cove
- Waterproof Decking

For all KRETUS® systems, see [kretus.com/systems](http://kretus.com/systems).

#### FINISH AND COLOR

- Clear, Low Gloss/Gloss (applied white, dries clear)

#### PRECAUTIONS AND LIMITATIONS

- **Prime Coat:** A prime coat may be required when stem walls are highly absorbent, if outgassing is suspected or prevalent, or if concrete is very porous or in poor condition.
- All concrete repairs must be completed before installing any system.
- DO NOT apply if relative humidity exceeds 80% or if ambient temperatures are below 40°F or above 90°F.
- DO NOT apply single coat greater than 6 mils thick (267 square feet per gallon).
- DO NOT install directly over moisture-sensitive concrete, broadcasted vinyl chip, 30-grit or larger quartz, or 80-mesh or larger aluminum oxide.
- DO NOT let material puddle on floor. This may cause white spots to appear when coating cures.
- **Application temperatures:** When temperatures increase or humidity decreases, material cures faster. Material cures slower when temperatures decrease or humidity increases. Apply material when temperature is decreasing—adhere to

the KRETUS® Dew Point Calculation Chart available at [kretus.com/project-planning](http://kretus.com/project-planning). DO NOT apply under direct sunlight. DO NOT install under inclement weather conditions. If application temperatures are outside of those recommended, contact your KRETUS® Technical Representative.

- Application times are based on test results compiled by lab technicians in a controlled setting. All times recorded using 1-quart samples.
- Coverage rates are for estimating purposes only. Factors such as waste, unusual/abnormal substrate conditions, and other unforeseen jobsite conditions may affect actual product yields and are the responsibility of the installer.
- Complete samples and onsite mockups to ensure desired results are achieved.

## COMPONENTS

### Standard Kit

- Part A: Hydrothane Part A, 1 gal
- Part B: Hydrothane Gloss or Low Gloss Part B, 1/2 gal

Larger kits may be available through KRETUS® distributor.

## SAFETY, TESTING, AND WARRANTY

- **Safety:** Personal protective equipment and safety conditions must be considered before using any product. Review all relevant and current documentation including Safety Data Sheets ([kretus.com/safety-data-sheets](http://kretus.com/safety-data-sheets)).
- **Testing:** Before installation: Test and look for any unknown site conditions and/or defects. To ensure desired results are achieved, the system should be tested in a small area on site before full installation begins.
- **Warranty:** For warranty to be upheld, Pre- and Post-Job Checklists ([kretus.com/project-planning](http://kretus.com/project-planning)) must be completed.

## STORAGE AND APPLICATION TEMPERATURES

Ideal Storage Environment	Dry, Out of Direct Sunlight, 60-80°F
Material Temperature During Application	50-70°F and 5°F Above Dew Point
Minimum Substrate Temperature During Application	5°F Above Dew Point
Recommended Application Temperature	60-75°F, <30-55% RH (Relative Humidity)

## Average Application Time

Ambient Temperature	50°F, 30% RH	50°F, 75% RH	70°F, 50% RH	90°F, 20% RH	90°F, 80% RH
Working Time	45-60 min	NR	30-35 min	10 min	NR
Recoat Window	24 hrs	NR	12-18 hrs	12-18 hrs	NR
Return to Service (Foot Traffic)	36 hrs	NR	24 hrs	24 hrs	NR
Full Cure (Vehicle Traffic)	7 days	NR	7 days	7 days	NR

## SURFACE PREPARATION

Before installing any coating, the substrate must be sound, meaning all necessary repairs have been completed. It must be clean, dry, and free of any contaminants, moisture, materials, or particles that may hinder material's adhesion to the substrate. If applying directly over concrete, the substrate must be mechanically profiled to ICRI CSP 1. Different projects may require a different CSP. Contact your KRETUS® Technical Representative. Adhere to International Concrete Repair Institute current standards.

## MIXING AND APPLICATION

Standard Kit Mix Ratio	A:B = 2:1
Roller/Blade/Squeegee Application Mix Ratio	May add up to 1 quart water per gallon

Spray Application Mix Ratio	2 gal water per gallon
Anti-Slip Bead 20 and Bead 50 (50/50 blend)	8-16 oz per gallon
Anti-Slip Bead 50 and Bead 100 (50/50 blend)	8-16 oz per gallon
Anti-Slip Bead 100	8-16 oz per gallon
Mixing Drill	low-RPM, low-torque drill with Jiffler double-bladed mixer
Mixing Directions	Add entire contents of part B into part A and 1 min or until consistency and color is uniform.
Mixing Directions with Anti-Slip	Add entire contents of part B into part A and mix for 1 min or until consistency and color is uniform. Add additive and mix for 1 minute or until color and consistency are uniform.

### Coverage Rate per Gallon

Top/Seal Coat Applied With Sprayer	800 SF/GAL
Top/Seal Coat Applied With 3/8" Nap Roller (Dip-and-Roll)	400 SF/GAL
Top/Seal Coat Applied With 5-7 WFT-Mil Blade	270-320 SF/GAL

Premeasure components to make sure you are using the correct mix ratio. Combine components according to mix instructions. Continue mixing until the coating's consistency is uniform. The coating must remain thoroughly mixed during the application.

Keep a wet edge while applying product. Wear spiked shoes when walking on material. For more applications and coverage rates, see KRETUS® General Overview ([kretus.com/product-general-overviews](http://kretus.com/product-general-overviews)).

### PROPERTIES WHEN FULLY CURED

PROPERTIES	TEST METHOD	TYPICAL VALUES
Abrasion Resistance	ASTM D4060	15 mg loss
Adhesion Strength	ASTM D4541	400 psi, 100% Concrete failure
Adhesion Strength	ASTM D4541	n/a, vinyl failure
Adhesion Strength	ASTM D4541	n/a, natural quartz failure
Adhesion Strength	ASTM D4541	n/a, color quartz failure
Coefficient of Friction - Dry	ASTM D2047	0.7
Coefficient of Friction - Wet	ASTM D2047	0.6
Flame Spread/ Critical Flux	ASTM E648	Class 1
Flame Spread/ Rate of Burning	ASTM D635	Self-extinguishing
Flexibility/ Mandrel Bend	ASTM D522	Passes 1/8-in.
Hardness (König Hardness)	ASTM D4366	150
Impact Resistance	ASTM D2794	120 in-lbs..
Indoor Air Quality	CA 01350	Compliant
Microbial Resistance	ASTM G21	Passes, 0 growth
Tensile Elongation at Break	ASTM D2370	5%
Tensile Strength	ASTM D2370	6,000 psi
UV Resistance	ASTM D4587	High (Level 3)
Water Absorption	ASTM D570	<0.05
Yellowing Resistance	ASTM G154	< 3.0 ΔE, gray (color tested for visible changes)

## CHEMICAL AND STAIN RESISTANCE

1 = Best for chemical resistance: Chemical has no adverse effects on fully cured coating; remove within 24 hours.

2 = Low potential for stain: Chemical has no adverse effects on fully cured coating if removed within 24 hours.

3 = High potential for stain or degradation: Chemical must be removed within 24 hours of exposure.

NR = Not recommended

Acetic Acid (Component of Vinegar), 10% .....	1	Methanol .....	1
Acetic Acid, 30%.....	2	Methylene Chloride .....	NR
Acetone.....	1	MIBK (Methyl Isobutyl Ketone).....	1
Ammonia, 30%.....	1	Mineral Oil .....	1
Ammonium Hydroxide, 30%.....	1	Motor Oil, SAE 30 .....	1
Antifreeze (Coolant).....	1	Mineral Spirits.....	1
Benzene (Component of Crude Oil).....	1	Mustard, Yellow.....	1
Benzyl Alcohol .....	1	Nitric Acid, 30% .....	NR
Betadine, 11% .....	1	Oleic Acid.....	1
Boric Acid, 4% .....	1	Oxalic Acid, 10%.....	1
Brake Fluid, DOT 3 .....	1	Phosphoric Acid, 20% .....	2
Chromic Acid, 10%.....	1	Potassium Hydroxide, 30%	
Chromic Acid, 30%.....	1	(Alkaline Batteries, Soap Manufacturing) .....	1
Citric Acid, 30%.....	1	Propylene Glycol.....	1
Ethanol, 95%.....	1	Silver Nitrate, 20% (Photo Labs) .....	3
Ethyl Acetate, 99% (Food/Beverage Facility) .....	1	Hydraulic Fluid (Aviation), Skydrol LD-4 .....	2
Formaldehyde, 37% .....	3	Sodium Chloride, 20%.....	1
Premium Gasoline.....	1	Sodium Hydroxide (Caustic Soda), 50% .....	1
Hydraulic Fluids		Sodium Hypochlorite (Bleach), 10% .....	1
(Machinery, Automobile, Aviation).....	2	Sodium Hypochlorite (Bleach), 30%.....	2
Hydrochloric Acid, 10%.....	1	Sodium Persulfate	
Hydrochloric Acid, 30%.....	3	(Bleaching and Oxidizing Agent) .....	3
Hydrofluoric Acid, 10% .....	1	Sulfuric Acid, 37% (Battery Acid) .....	2
Hydrofluoric Acid, 30% .....	3	Tannic Acid, 20%.....	3
Hydrogen Peroxide, 10% .....	1	Tartaric Acid, 10% .....	1
Hydrogen Peroxide, 50% .....	1	Transmission Fluid .....	1
Iodine, 2%.....	3	Urine, Dog or Cat .....	1
Isopropyl Alcohol .....	2	Urea (Nitrogen-Rich Fertilizer).....	1
Jet Fuel.....	1	Vinegar, Distilled.....	1
Lactic Acid, 30% (Dairy Facility).....	3	Water (Hard Water from Well) .....	1
Lime Juice .....	1	Whisky .....	1
Magnesium Hydroxide.....	1	Wine, Cabernet Sauvignon .....	1
MEK (Methyl Ethyl Ketone) .....	1	Xylene .....	1

Pigments or colorants may affect working times, reduce chemical resistance, or increase potential for stain. Coatings tested at ambient temperature over 1-3 days' exposure to chemical. To ensure desired results are achieved, products should be tested on site before installation.

**DISCLAIMER:** The information contained in this document is intended for use by KRETUS®-qualified and -trained professionals. This is not a legally binding document and does not release the specifier from their responsibility to apply materials correctly under the specific conditions of the construction site and the intended results of the construction process. The most current valid standards for testing and installation, acknowledged rules of technology, as well as KRETUS® technical guidelines must always be adhered to. The steps given in this document and other mentioned documents are critical to the success of your project.