UltraScrape Polyurea



PRODUCT NAME

UltraScrape Polyurea
Standard

MANUFACTURER

Ultra Durable Technologies
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ADDITIONAL INFO
(SDS, Warranty, & more)

PRODUCT DESCRIPTION

UltraScrape Polyurea is a high-solids concrete basecoat with rapid curing properties that allow for fast chip-scraping and topcoating times. UltraScrape Polyurea was developed as an alternative to the MC Epoxy line of coatings to provide contractors the ability to complete projects quickly, like the increasingly popular “one-day garage floor” system.

UltraScrape Polyurea is pre-pigmented in Mineral Gray and Medium Tan, which can be adjusted as desired by using UltraColor Universal Pigment. The Standard version is designed for warmer, humid environments.

WHY CHOOSE UltraScrape Polyurea?

Due to its flexibility and tenacious bond strength to concrete, UltraScrape Polyurea is typically specified as a thin-film, pigmented “body coat” for the UDT Chip Flake and Quartz systems.

Contractors choose Standard for its extended working time and industry-comparable fast dry times.

Contractors appreciate the friendly “flow” and “feel” of UltraScrape Polyurea along with the excellent hide (opacity) and lack of settling in the containers.

UNIQUE ADVANTAGES

- Low odor & low viscosity
- Rapid dry times
- Excellent pigment stability and opacity (hide)
- Flexible
- Non-hazardous / DOT & IATA (air) non-regulated

PROVEN INDUSTRIES

Residential: Garages and decorative concrete floors
Commercial: Stadiums, restaurants, kitchens, restrooms, decorative floors
Institutional: Corridors, loading docks, warehouses
Government: Armed forces bases, airport hangars, warehouses

PACKAGING

2 components with a 2:1 radio (2 Parts A to 1 Part B)
3-Gallon Kit: 1x2-gal cans Part A + 1x1-gal jug Part B
15-Gallon Kit: 2x5-gal pails Part A + 1x5-gal pail Part B

COVERAGE RATES

Recommended coverage rates and mil thickness:
Apply between 5-7 mils wet (230-320 sq ft / gal)
Do not apply more than 8 mils wet (<200 sq ft / gal)
Texture, absorption of surface, and application processes will determine final coverage rates. Rough or porous concrete may require additional material.

SHELF LIFE

12 months unopened when stored at room temperature (59-77°F, 15-25°C)

TECHNICAL DATA (72°F, 40% RH)

Solids Content	99%±1%	ASTM D2369
VOC Content	6 g/L	ASTM D5201
Mixed Viscosity	750 cps	ASTM D2196
Taber Abrasion CS-17, 1000 cycles	61 mg loss	ASTM D4060
Konig Hardness	85	ASTM D4366
Tensile Strength	1982 psi	ASTM D2370
Elongation	45.83%	ASTM D2370
Mandrel Bend (1/8”)	Pass	ASTM D522
Reverse Impact Resistance	154	ASTM D2794
Pull-Off Adhesion	> 750 psi (concrete failure)	ASTM D7234
Permeability	0.87	ASTM D1653
Recoat Window	24 hours	
Full Cure	7 days	

UltraScrape Polyurea

ULTRA DURABLE TECHNOLOGIES
Manufacturing Innovative Coatings

DRY TIMES

Times are approximate and will vary depending on air temperature, floor temperature, and humidity.

Temperature	Relative Humidity	Working Time	Scrape Time
40°F	50%	>30 min	6hr
50°F	50%	>30 min	5hr
60°F	50%	>30 min	2.5hr
70°F	42%	28 min	2hr
75°F	55%	25 min	1hr 45m
80°F	55%	23 min	1hr 30m
85°F	55%	20 min	1hr 15m
90°F	70%	16 min	1hr

ENVIRONMENTAL TESTING

Moisture Content: Concrete must be cured prior to coating (poured and aged at a material temp of at least 75°F for at least 30 days), structurally sound, and free of contaminants including but not limited to waxes, loose paint, dust, dirt, grime, oils, release agents, curing compounds, and any surface laitance (a layer of weak and nondurable material). All interior concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride testing (ASTM F1869) or plastic sheet testing (ASTM D4263) and relative humidity probe testing (ASTM F2170) to determine if excessive levels of moisture vapor emissions are present before applying any coatings. Slabs on grade must have a moisture vapor emission rate of less than 3 pounds / 1,000 sq ft / 24 hours when measured by calcium chloride test and less than 75% relative humidity when measured using in situ probes. Rates above these thresholds require a moisture vapor barrier. (see UDT MV Epoxy Primer)

Air Temperature and Humidity / RH: High temperatures and high humidity will shorten the dry time and working time. Low temperatures and low humidity will lengthen the dry time and working time.

Floor Temperature and Dew Point: UDT Polyurea must not be applied when the substrate (floor) temperature is less than 5°F above the dew point. Test the air temperature, relative humidity, and floor temperature in the area using a Psychrometer and Infrared Thermometer. Monitor the substrate temperature, indoor temperature, and RH. Utilize fans and/or dehumidifiers as needed to correct or prevent existing or possible dew point conditions until the installation is complete. All substrates must be prepared by trained or experienced contractors or maintenance personnel.

FLOOR PREPARATION

Concrete must be lightly shot-blasted or diamond ground with 30- to 80-grit metal bond diamonds to achieve a minimum Concrete Surface Profile (CSP) of 2 to 3. Concrete must be cured prior to coating (poured and aged at a material temperature of at least 75°F for at least 30 days), structurally sound, and free of contaminants including but not limited to waxes, loose paint, dust, dirt, grime, oils, release agents, curing compounds, and any surface laitance (a layer of weak and nondurable material). If prepared concrete is suspected to be contaminated with any of these materials, test for their presence by spraying a thin coat of water onto the concrete. If water beads on the surface, contamination is likely present and the concrete should be scrubbed with a degreaser or mild detergent, rinsed with clean water, and allowed to thoroughly dry prior to coating.

MIXING INSTRUCTIONS

1) Wear gloves and safety glasses when mixing. Mix quantity that will be used within working time.
2) Pre-mix Part A for 1 minute.
3) By volume, pour out 2 parts A into a separate mixing container. (For adjusting the pre-pigmented color, add small amounts of UltraColor Universal to Part A and drill mix for 1 minute.)
4) By volume, add 1 part B to the mixing container and drill-mix on low speed for 90 seconds. Make sure the sides and bottom of the container are scraped to ensure complete mixing.
5) Immediately pour all contents onto the floor and complete spreading and rolling within the stated working time in the table above.

APPLICATION INSTRUCTIONS

1) Patch cracks, holes, and spalling prior to application. Wear spiked shoes and pour UDT Polyurea on floor.
2) Spread evenly with a 5- to 7-mil squeegee.
3) Roll all areas with a high-quality 3/8" nap woven roller to ensure a consistent application thickness in all areas.
4) Broadcast chips before the coating begins to set up.
5) Carefully scrape and remove loose chip flakes once UDT Polyurea has hardened sufficiently (see Dry Times tables above).
6) Mix and apply UltraSpartic. See UltraSpartic TDS for mixing and application instructions.