UltraSpartic 85 Polyaspartic

PRODUCT NAME
UltraSpartic 85

MANUFACTURER
Ultra Durable Technologies
1415 5th Street North
St. Cloud, MN 56303
Phone: 320-258-2266
Toll free: 800-722-2998
Website: www.ultradt.com

PRODUCT DESCRIPTION
UltraSpartic 85 is a unique, economical, low-viscosity, fast-drying polyaspartic / polyurea that stays clear and will not blush or haze at high film thicknesses (15 mils).

UltraSpartic 100, 95 & 85 are commonly used as topcoats in abusive environments such as garages, warehouses, and production areas.

UltraSpartic 100, 95 & 85 may be used as clear primers for Ultra HTS Grind, Clear Prime & Seal Systems.

UltraSpartic 100, 95 & 85 may be pigmented with UltraColor Pigment Packs to achieve a solid-colored primer, body-coat, or topcoat.

Finally, UltraSpartic 100, 95 & 85 have excellent bond strength, UV resistance, chemical resistance and gloss retention.

UNIQUE ADVANTAGES OF ULTRASPARTIC 85
- Excellent UV stability
- Fast dry time
- Excellent chemical and tire-stain resistance
- Great leveling properties
- Tintable with UltraColor Pigment Packs
- DOT non-regulated

PROVEN INDUSTRIES
Commercial: stadiums, restaurants, kitchens, restrooms
Institutional: corridors, loading docks, storage facilities
Government: Armed Forces bases, parking garages
Residential: garages and decorative concrete floors
Industrial: warehouse, production areas, mechanic shops

PACKAGING
2 components, 2:1 ratio (2 Parts A : 1 Part B)
3-gallon Kit: 2 x 1-gal. can Part A + 1 x 1-gal. can Part B
15-gallon Kit: 2 x 5-gal. pail Part A + 1 x 5-gal. pail Part B
Optional – Tintable with UltraColor Pigment Pack:

COVERAGE RATE
Average coverage rate: 120-320 SF / gallon (5-15 mils).
Thin-film primer coverage: up to 800 SF / gallon (2 mils).
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids content</td>
<td>85% +/−2%</td>
</tr>
<tr>
<td>Volatile Organic Content (VOC)</td>
<td>141 g/l</td>
</tr>
<tr>
<td>Gloss @ 60° angle</td>
<td>95°</td>
</tr>
<tr>
<td>Mixed viscosity</td>
<td>100 cps</td>
</tr>
<tr>
<td>Mixed viscosity (5% xylene)</td>
<td>50 cps</td>
</tr>
<tr>
<td>Mixed viscosity (10% xylene)</td>
<td>20 cps</td>
</tr>
<tr>
<td>Taber Abrasion (CS-17 Wheel, 1000 cycles)</td>
<td>7 mg</td>
</tr>
<tr>
<td>Pencil Hardness</td>
<td>4H</td>
</tr>
<tr>
<td>König Hardness</td>
<td>126</td>
</tr>
<tr>
<td>Pull-off adhesion</td>
<td>concrete failure</td>
</tr>
<tr>
<td>Impact Resistance</td>
<td>60%</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>3447 psi</td>
</tr>
<tr>
<td>Elongation</td>
<td>8.3%</td>
</tr>
<tr>
<td>Elasticity (Mandrel Bend)</td>
<td>1/8” Pass</td>
</tr>
</tbody>
</table>

Data collected at 75°F, 50% RH, 10 mil application

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot life (double viscosity)</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Working time</td>
<td>12 minutes</td>
</tr>
<tr>
<td>Dust free</td>
<td>1 hour</td>
</tr>
<tr>
<td>Water-resistant</td>
<td>2 hours</td>
</tr>
<tr>
<td>Re-coat window (clear)</td>
<td>2 - 24 hours</td>
</tr>
<tr>
<td>Re-coat window (pigmented)</td>
<td>not recommended</td>
</tr>
<tr>
<td>Light foot traffic</td>
<td>3 hours</td>
</tr>
<tr>
<td>Chemical/tire resistant</td>
<td>24 hours</td>
</tr>
<tr>
<td>Full cure</td>
<td>7 days</td>
</tr>
</tbody>
</table>
**Topcoat preparation:**

**Direct to concrete preparation:** With 80-150 grit screens prior to application. If applying resinous flooring, mechanically abrade the surface by grinding blasted or diamond ground with 30-80 grit metal bond diamonds or scrub with 60 grit sand screens.

**Indoor 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 shall have a moisture vapor emission rate of less than 3 pounds / 1,000 sf / 24 hours when measured by calcium chloride test and less than 75% relative humidity when measured using in situ probes. Test the air temperature, relative humidity, and floor temperature in the area to be finished using a Psychrometer and Infrared Thermometer.**

**Floor Temperature and Dew Point:** UltraSpartic 85 SHALL NOT be applied when the RH is above 80%.

**Slip Resistance:**

- UDT recommends the use of traction additives in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor’s and end users’ responsibility to select and provide a flooring system that meets current safety standards. UDT makes no claims of longevity of SCOF or DCOF results.
- After completing the application of UltraSpartic 85, routine sweeping, mopping, washing and mechanical scrubbing is recommended. Cleaning with plain water is suitable in most environments. Use pH neutral cleaners if necessary. The installer should provide the owner with maintenance instructions.
- Warranty: Ultra Durable Technologies, Inc. products are warranted to be of uniform quality within manufacturing tolerances. Since no control is exercised over its use, no warranty, expressed or implied, is made to the effects of such use. Seller and manufacturer’s obligations under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective. Contact your UDT Representative for more information about the UDT Performance Guarantee.

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**Environmental Testing**

**Moisture Content:** All indoor 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 shall have a moisture vapor emission rate of less than 3 pounds / 1,000 sf / 24 hours when measured by calcium chloride test and less than 75% relative humidity when measured using in situ probes. Test the air temperature, relative humidity, and floor temperature in the area to be finished using a Psychrometer and Infrared Thermometer.**

**Air Temperature:** UltraSpartic 85 SHALL NOT be applied when the air temperature is above 90°F or below 20°F.

**Relative Humidity (RH):** UltraSpartic 85 SHALL NOT be applied when the RH is above 80%.

**Floor Temperature and Dew Point:** UltraSpartic 85 SHALL NOT be applied when the substrate (floor) temperature is less than 5° above the dew point (See DEW POINT CALCULATION CHART). Monitoring the substrate temperature, indoor temperature and RH, and utilizing fans and/or dehumidifiers as needed will help 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. UDT and its representatives or sales agents will not be responsible for coating failures due to improper preparation processes, undetected moisture vapor emissions, or other unacceptable environmental conditions.

**Floor Preparation**

**Direct to concrete preparation:** Concrete shall be lightly shot-blasted or diamond ground with 30-80 grit metal bond diamonds to achieve a minimum of CSP 2 - CSP 3 concrete surface profile. Concrete must be cured prior to coating 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). 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.

**Topcoat preparation:** If applying UltraSpartic 85 as a topcoat over freshly applied UDT’s coatings such as MC Epoxy or Cold Cure Epoxy, apply within the stated recoat window or abrade with 80-150 grit screens prior to application. If applying UltraSpartic 85 as a second coat over UltraSpartic 85, it is always recommended to screen or abrade the surface between coats. If UltraSpartic 85 is being applied over an old or existing resinous flooring, mechanically abrade the surface by grinding blasted or diamond ground with 30-80 grit metal bond diamonds or scrub with 60 grit sand screens.

**Mixing Instructions**

Ensure that Parts A and B are at room temperature (59-77°F, 15-25°C) prior to mixing.

1. Wear gloves and safety glasses when mixing. Mix quantity that will be used within working time (12 minutes at 75°F)

2. Pre-mix part A for 1 minute

3. By volume, pour out two (2) parts A into a separate mixing container.

4. Optional – Add UltraColor and mix for 1 minute or uniform in color (either 1 or 2 x pints per 3 mixed gallons of UltraSpartic – depending on system).

5. Optional – Add up to 10% xylene and mix for 1 minute.

6. Add one (1) part B to the mixing container and drill-mix at low-speed for 3 minutes.

7. Complete spreading and rolling within 12 minutes

**UltraColor Options:**

Make note of the recoat window when using UltraColor pigment packs with UltraSpartic 85. See UltraColor Pigment Pack TDS for color availability. Not all colors will achieve 100% hide in one coat. White and some other light colors may require multiple coats, thicker film builds, and/or more pigment when mixing. Contact your UDT Representative for additional information.

**Application Instructions**

Apply UltraSpartic 85 using a flat or notched squeegee and back-roll the spread material immediately with a 3/8” nap or shorter roller. The “pour and roll” method may also be used. To avoid roller lines or tracking, roll quickly from end to end. Do not exceed 12 minutes of working time or 15 minutes of pot life. Use joint or saw cuts as natural breaks to divide sections of the floor. UltraSpartic 85 will set-up, dry and cure faster in high-humidity environments. Never apply to a wet or damp substrate. Film thicknesses greater than 15 mils may entrap solvent resulting in entrapped air / CO2 bubbles. If allowed to puddle, CO2 bubbles will appear as white or frosted areas. Contact your UDT representative if a film-build higher than 15 mils is desired.

**Slip Resistance**

UDT recommends the use of traction additives in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor’s and end users’ responsibility to select and provide a flooring system that meets current safety standards. UDT makes no claims of longevity of SCOF or DCOF results. UDT and any representatives or sales agents will not be responsible for injury incurred in a slip and fall accident.

**Maintenance Instructions**

After completing the application of UltraSpartic 85, routine sweeping, mopping, washing and mechanical scrubbing is recommended. Cleaning with plain water is suitable in most environments. Use pH neutral cleaners if necessary. The installer should provide the owner with maintenance instructions.

**Warranty**

Ultra Durable Technologies, Inc. products are warranted to be of uniform quality within manufacturing tolerances. Since no control is exercised over its use, no warranty, expressed or implied, is made to the effects of such use. Seller and manufacturer’s obligations under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective. Contact your UDT Representative for more information about the UDT Performance Guarantee.