

## TOPS85 : 85% POLYASPARTIC TOP COAT CLEAR

# TECHNICAL DATA SHEET

### DESCRIPTION

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TopS85 is a two-component, 85% solids, V.O.C. compliant, aliphatic polyaspartic polyurea that was developed for UV stable floor topcoats. It provides outstanding appearance, superior chemical, UV, and solvent resistance. It exhibits excellent physical properties. This system has been approved by the Canadian Food Inspection Agency (C.F.I.A.).

### PRIMARY APPLICATIONS

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- Marine protection for fiberglass, steel, concrete or wood
- UV-stable top coat
- Aircraft hangar floors
- Low temperature equipment
- Maintenance facilities
- Offshore platforms
- Industrial shop floors
- Car washes or wash bays
- Secondary Containment
- Cooling towers
- Bridges
- Wastewater treatment applications

### ADVANTAGES

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- Long pot life (90 min to 100 min)
- Displays fast cure times with excellent adhesion
- Superior chemical resistance
- Superior weather and abrasion resistance
- Non yellowing and good gloss retention
- Easy to mix 1:1 ratio by volume
- Emits virtually no odors and can be applied indoors
- Excellent adhesive properties, allowing application on other firm and hard coating, ù as well as a good bond to the substrate
- V.O.C. compliant in all 50 states and Canada

## TECHNICAL DATA

<b>PACKAGING</b>	7.57 L (2 US GAL KIT) OR 37.8 L (10 US GAL KIT)
<b>COLOR</b>	Upon request
<b>RECOMMENDED THICKNESS</b>	Primer (TopS85) - 8 MILS (200 ft <sup>2</sup> /gal) Finish Coat (TopS85) - over solid color : 6 MILS (266 ft <sup>2</sup> /gal) - over vinyl chips : 10 MILS (160 ft <sup>2</sup> /gal)
<b>SHELF LIFE</b>	12 months in original unopened factory sealed containers. Keep away from extreme cold, heat or moisture. Keep out of direct sunlight and away from fire hazards.
<b>MIX RATIO, BY VOLUME</b>	A:B = 1:1
<b>MIX RATIO, BY WEIGHT</b>	A:B = 100:110
<b>POT LIFE (454 G)</b>	90-100 minutes @ 25°C

## PROPERTIES

@ 77°F (25°C) AND 55% R.H.

\* Please note, that the indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage. \*

\*\* Please note that the indicated viscosity is for clear product only. Any addition of colorant may affect the viscosity. \*\*

<b>VOC (Volatile Organic Compounds), (VOC Calculated Per ASTM D3960)</b>	0 g/L
<b>SOLIDS CONTENT, BY VOLUME</b>	Part A 93%   Part B 78%   Mix 85%
<b>SOLIDS CONTENT, BY WEIGHT</b>	Part A 92%   Part B 75%   Mix 83%
<b>DENSITY (KG/L)</b>	Part A 1.06   Part B 1.15   Mix 1.11
<b>THINNER RECOMMENDED</b>	Xylene
<b>DRYING TIMES</b>	Tack-Free 4 - 6 hours Recoat Time 6 - 10 hours Foot Traffic 12 - 24 hours Heavy Equipment Traffic > 48 hours Full Cure 24 - 48 hours
<b>ABRASION RESISTANCE, ASTM D4060 TABER ABRASER CS-17 WHEEL / 1000G (2.2 LBS.) / 1000 CYCLES</b>	30 mg loss
<b>ADHESION, ASTM D4541</b>	Concrete-primer : > 550 psi (substrate ruptures)
<b>WATER ABSORPTION, ASTM D570</b>	0.2 %
<b>WATER VAPOUR TRANSMISSION, ASTM E96</b>	Water procedure B Film 0.01cm (0.004") : 1 perm
<b>HARDNESS (SHORE D), ASTM D2240</b>	75-78
<b>FLEXIBILITY, 1/8" MANDREL, ASTM D1737</b>	Pass
<b>FALLING SAND ABRASION RESISTANCE (L SAND/ 1 DRY MIL), ASTM D968</b>	45
<b>VISCOSITY @ 25°C</b>	Part A 350-450 cps   Part B 75-100 cps   Mix 125-225 cps
<b>GLOSS, ASTM D523</b>	95+
<b>FIRE RATING CAN/ULC S102 ESTIMATED ON SIMILAR COATING</b>	Flame spread 5   Smoke developed 94
<b>TENSILE STRENGTH, ASTM D638</b>	6500-7500 psi
<b>COMPRESSIVE STRENGTH (PSI MPA), ASTM D695</b>	9500   *W/Quartz 13700   *W/Chips 12200
<b>ELONGATION AT BREAK, ASTM D638</b>	100%
<b>TEAR STRENGTH (PLI), ASTM D2240</b>	350

## SURFACE PREPARATION

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**Old concrete** Concrete surface must be cleaned. BLASTRAC, sand blasting, diamond grinder w/30 grit or coarse, or water blasting is highly recommended to remove surface contaminants. Any oils and fats must be removed prior to product application. Acid etching may be required (followed by a thorough rinsing) to open the pores of the concrete to accept a primer. Do not apply to wet substrates. Chloride, moisture, and pH levels should be checked prior to application. In almost every application a primer (TopS85) is recommended prior to use of TopS85.

**New concrete** The concrete should be allowed to cure for a minimum of 30 days. Compression resistance of concrete must be at least 25 mpa (3625 lbs./in<sup>2</sup>) after 28 days and traction resistance must be at least 1,5 mpa (218 lbs./in<sup>2</sup>). Blastrac, sand blasting, diamond grinder w/30 grit or coarser or acid etching (followed by a thorough rinsing) is required to remove the surface laitance that appeared during the curing process. A primer (TopS85) should be used to reduce out-gassing and promote adhesion

## MIXING

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Materials should be pre-conditioned to a minimum of 10° C prior to use. Thoroughly mix each component separately. Pour component B into component A using the proper mixing ratio of 2A:1 B by volume. Mix both components for at least 1 minute using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture.

## APPLICATION

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Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.

## OVERLAPS

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Subsequent overlaps must be applied when primer is still wet or tacky. If primer has dried reprime. Porous substrates may require multiple priming.

## CLEANING

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Clean all tools and materials with appropriate cleaner before the product cures. Wash hands and skin carefully with warm soapy water. Once product has hardened, it may only be removed through mechanical means.

## RESTRICTIONS

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- Minimum/Maximum temperature of substrate: 5°C / 30°C (42°F / 86°F).
- Maximum relative humidity during application and curing: 85%.
- Substrate temperature must be 3°C (5.5°F) above dew point measured.
- Humidity content of substrate must be < 4 % when coating is applied.
- Do not apply on porous surfaces where a transfer of humidity may occur during application.
- Protect from humidity, condensation and contact with water during the 24 hour initial curing period.

## HEALTH AND SAFETY

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In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse. For more information, consult the material safety data sheet.

Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation.

*\*Consult the material safety data sheet for further information.\**

## IMPORTANT NOTICE

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