



POLYASPARTIC 85-SC

Aliphatic Polyaspartic Coating

TCS CONTRACTOR SERIES | TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

TCS Polyaspartic 85-SC is a two-component, solvent-borne aliphatic polyaspartic system designed to protect concrete surfaces while providing an attractive finish. The coating exhibits excellent mechanical properties together with UV stability and resistance to chemicals and solvents.

APPLICATIONS AND ADVANTAGES

APPLICATIONS	ADVANTAGES
• Industrial flooring • Bridges • Maintenance facilities • Aircraft hangar flooring • Car washes • Areas requiring a resistant flooring topcoat	• Low odor • Aesthetic finish • Superior mechanical resistance • Good chemical and physical resistance • Easy-to-clean surface resistant to bacteria and moisture

TECHNICAL DATA @ 25°C / 77°F

Storage	Store components dry in temperature-controlled areas between 54-82°F (12-28°C). Do not expose to freezing or excessive heat.
Solids by weight	85%
VOC content	>200 g/L
Gel time (100 g)	60-90 minutes
Specific gravity	Part A: 1.01 Part B: 1.08
Mixing ratio by volume	100:100 (1:1)
Coverage over flakes	8-12 mils 130-200 ft²/US gal
Coverage over solid color	8 mils 200 ft²/US gal
Color	Clear, beige, and gray
Working time (73°F / 12% RH)	40-60 minutes
Tack-free time, 8 mils (73°F / 12% RH)	5-7 hours
Mixed viscosity	150-200 cP
Suggested number of coats	1-2
Shelf life	12 months, unopened

Coverage rates are theoretical and vary with surface profile, porosity, waste, application method, and jobsite conditions.

PERFORMANCE PROPERTIES

PROPERTY	TEST METHOD	RESULT
Compressive strength	ASTM D695	9,000-10,000 psi
Bond resistance	ASTM D4541	500 psi
Tensile strength	ASTM D638	6,000-7,000 psi
Hardness (Shore D)	ASTM D2240	75-80
Water vapor transmission	ASTM E96	1 perm
Elongation	ASTM D638	100%
Abrasion resistance	ASTM D4060; CS17/1000 cycles/1000 g	30 mg
Water absorption	ASTM D570	0.2%

RECOAT AND CURE SCHEDULE

Recoat window

SUBSTRATE TEMP.	MINIMUM	MAXIMUM
Approx. 50°F	1 day	2 days
Approx. 70°F	6 hours	12 hours
Approx. 86°F	4 hours	8 hours

Curing details

SUBSTRATE TEMP.	FOOT TRAFFIC	LIGHT TRAFFIC	FULL CURE
Approx. 50°F	3 days	7 days	10 days
Approx. 70°F	2 days	5 days	7 days
Approx. 86°F	1 day	3 days	5 days

Times are approximate and depend on ambient temperature, substrate temperature, humidity, film thickness, and ventilation.

SURFACE PREPARATION

The surface must be clean, sound, and dry. Remove trowel marks and surface imperfections to produce a smooth, uniform surface. Proper preparation is critical for adequate chemical bond. The substrate must be free of wax, grease, oil, fats, soil, contaminants, loose or foreign matter, and laitance. Mechanically prepare concrete by shot blasting or suitable grinding to achieve ICRI CSP 3-4. Concrete compressive strength should be at least 3,500 psi (24 MPa) at 28 days and tensile strength at least 215 psi (1.5 MPa) at application.

MIXING

Material is supplied in factory-proportioned quantities. Pour the entire contents of Part B into the container holding Part A. Mix for 3 minutes until homogeneous. Scrape the sides and bottom of the container with a straight-edged trowel at least once during mixing. Empty all Part B into Part A to avoid incomplete cure or reduced performance.

DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED WITHIN THE WORKING-TIME LIMIT.

POT LIFE, APPLICATION, AND CURING

Pot life	Approximately 60-90 minutes after mixing 454 g at 77°F. Pot life depends on ambient conditions.
Application	Apply with a rubber squeegee and back-roll smooth surfaces with a 10 mm lint-free nap roller to remove squeegee lines and smooth the coating.
Return to service	Topcoat may be placed back into service after 24 hours. Full product characteristics are achieved after 72 hours. Cure depends on ambient and surface conditions.

PRECAUTIONS AND LIMITATIONS

Before application, measure and confirm substrate moisture content, ambient temperature, and surface temperature.

Substrate moisture: Moisture must be no more than 4% by mass when measured with a Tramex-type concrete moisture meter on the mechanically prepared surface.

Do not add thinners, solvents, or water. Dispose of waste in accordance with applicable regulations. Use safety glasses and chemical-resistant gloves. Use only in well-ventilated areas.

HEALTH AND SAFETY

In case of skin contact, wash with soap and water. For eye contact, immediately rinse with water for at least 15 minutes and consult a physician. For respiratory irritation, move the affected person to fresh air. Remove contaminated clothing and clean before reuse.

Parts A and B contain hazardous ingredients. Prolonged skin contact may cause irritation. Avoid eye contact; contact may cause serious burns. Avoid breathing vapors. This product is a strong sensitizer. Wear safety glasses and chemical-resistant gloves. A NIOSH/MSHA-approved respirator suitable for organic vapors is recommended where required. Work in a well-ventilated area.

Consult the current Safety Data Sheet (SDS), product label, and applicable regulations before handling or use.

IMPORTANT NOTICE

The statements, recommendations, and technical information in this document are based on information believed to be accurate for the material identified. Results may vary when the product is used with other materials or under different site conditions. The user is responsible for determining suitability, conducting jobsite tests, and following the current product label and SDS. To the fullest extent permitted by law, Twin Coating Supplies' responsibility is limited to replacement of product or refund of the purchase price under the applicable sales agreement.