

## PRODUCT DESCRIPTION:

**COMMERCIAL GRADE** is a dual-component, VOC Compliant, 100% solids aliphatic polyaspartic designed for UV-stable topcoats for flooring applications. It offers excellent aesthetics and superior resistance to chemicals, UV rays, and solvents. This product demonstrates outstanding physical properties.

## PRIMARY APPLICATIONS:

- Aircraft Hangar Floors
- Maintenance Facilities
- Cooling Towers
- Bridges
- Low-Temperature Equipment
- Marine Protection for Fiberglass, Steel, Concrete, or Wood Surfaces
- Secondary Containment
- Offshore Platforms
- Industrial Shop Floors
- Wastewater Treatment Applications
- Car Washes or Wash Bays

## BENEFITS:

- High chemical resistance
- UV-stable top coat
- Non-yellowing with good gloss retention
- **VOC compliant across all 50 states.**
- Simple 1:1 mixing ratio by volume
- Excellent adhesion properties, suitable for application on firm and hard coatings.
- Minimal odor, suitable for indoor application
- Rapid curing with excellent adhesion
- Extended pot life (90 to 100 minutes)
- Outstanding weather and abrasion resistance

#### TECHNICAL DATA:

Property	Value
Packaging	Available in 7.57 L (2 US gal.) and 37.8 L (10 US gal.) containers
Color	Customizable upon request
Yield/Recommended Thickness	
- Primer	COMMERCIAL GRADE: 5-10 mils D.F.T. (350-150 ft <sup>2</sup> /gal)
- Finish Coat	COMMERCIAL GRADE: 6-10 mils D.F.T. (350-150 ft <sup>2</sup> /gal)
Shelf Life	12 months when stored in original unopened containers; protect from extreme temperatures and moisture. Keep out of direct sunlight and away from fire hazards.
Mixing Ratio (by volume)	A = 1:1 (100:100)
Mixing Ratio (by weight, grams)	A = 100:107
Working Time (454 g)	40-50 minutes @ 25°C

#### PROPERTIES @ 73° F AND 50% R.H.:

Property	Part A	Part B	Mixed
Solids Content, by weight	100%	100%	98.5%
Solids Content, by volume	100%	100%	98.5%
Specific Gravity	1.12-1.13	1.13-1.14	1.05-1.10
Viscosity @ 25°C (cps)	400-500	150-180	300-400
Gloss Level, ASTM D523	95+		
Fire Rating, CAN/ULC S102	Based on similar coatings		
- Flame Spread	5		
- Smoke Development	94		
Tensile Strength, ASTM D638 (psi)	7000-8000		
Compressive Strength, ASTM D695 (psi)	9000-10000		
- With Quartz	13700		
- With Chips	12200		
Elongation at Break, ASTM D638 (%)	100-110		
Tear Strength (PLI), ASTM D2240	350		
VOC Content	0 g/L		

#### PROPERTIES @ 73°F AND 50% R.H.:

Property	Standard/Method	Value/Description
Adhesion	ASTM D4541	> 500 psi (substrate ruptures)
Water Absorption	ASTM D570	0.2%
Water Vapor Transmission	ASTM E96	1 perm
Hardness (Shore D)	ASTM D2240	75-78
Flexibility, 1/8" Mandrel	ASTM D1737	Pass
Falling Sand Abrasion Resistance	ASTM D968	45 (L sand/1 dry mil)
Viscosity @ 25°C	Part A: 400-500, Part B: 150-180, A/B Mix: 300-400	
Recoat Time	Substrate Temp: ±10°C: 1 day (Min) - 2 days (Max), ±20°C: 6 hours (Min) - 12 hours (Max), ±30°C: 4 hours (Min) - 8 hours (Max)	
Curing Details	Substrate Temp: ±10°C: 3 days (Foot Traffic), 7 days (Light Traffic), 10 days (Full Cure)	
	±20°C: 2 days (Foot Traffic), 5 days (Light Traffic), 7 days (Full Cure)	
	±30°C: 1 day (Foot Traffic), 3 days (Light Traffic), 5 days (Full Cure)	
Gloss	ASTM D523	95+
Tensile Strength	ASTM D638	7000-8000 psi
Compressive Strength	ASTM D695	9000-10000 psi
	*W/Quartz: 13700	
	*W/Chips: 12200	
Elongation at Break	ASTM D638	100-110%
Tear Strength (PLI)	ASTM D2240	350
VOC	-	28 g/L

## **SURFACE PREPARATION:**

### **OLD CONCRETE:**

Prepare the concrete surface by thoroughly cleaning and mechanically treating it with shot blasting, sandblasting, or diamond grinding. Ensure all oils, sealants, curing agents, waxes, and fats are removed before applying the product. Do not apply to wet substrates. Check chloride, moisture, and pH levels before application. It is strongly advised to use a primer prior to applying **COMMERCIAL GRADE**. Fill and repair all cracks and substrate imperfections before application.

### **NEW CONCRETE:**

Allow new concrete to cure for at least 30 days. Ensure the compression strength of the concrete is at least 25 MPa (3625 psi) after 28 days and that the traction resistance is at least 1.5 MPa (218 psi). Use shot blasting, sandblasting, or diamond grinding to remove surface laitance formed during concrete finishing and curing. It is recommended to use a primer to seal porous concrete surfaces before applying **COMMERCIAL GRADE**. Fill and repair all cracks and substrate imperfections prior to application.

## **MIXING:**

Materials should be pre-conditioned to a minimum of 15°C (50°F) before use. Thoroughly mix each component separately with a paddle mixer and a drill for at least 2 minutes to evenly suspend the solids. Pour component B into component A using the correct mixing ratio of 1A:1B by volume. Mix both components together for at least 3 minutes with a drill at low speed (300-450 rpm) to minimize air entrapment. Scrape the bottom and sides of the container at least once to ensure a homogeneous mix. Only prepare the quantity that can be applied within the pot life of the mixture.

**APPLICATION:**

Apply the mixed product tightly (thin film) on the prepared surface using a rubber squeegee and then roll to achieve a uniform coating. Avoid creating puddles.

**CLEANING:**

Clean all application tools and equipment with the specified cleaner immediately after use. Once the product has cured, it can only be removed by mechanical means. If splatters occur, wash thoroughly with warm soapy water.

**OVERLAP:**

Apply subsequent coats while the primer is still wet or tacky. If the primer has dried, reapply the primer. Porous surfaces may require multiple priming applications.

**LIMITATIONS:**

- Maintain substrate temperature between 15°C (59°F) and 30°C (86°F) during application.
- Do not exceed 85% relative humidity during application and curing.
- Ensure substrate moisture content is below 4% at the time of coating.
- Avoid applying to porous surfaces where moisture transfer can occur during application.
- Protect the coating from humidity, condensation, and water contact during the first 24 hours.

**HEALTH AND SAFETY**

In case of skin contact, wash thoroughly with soap and water. If the product gets into the eyes, rinse immediately with water for at least 15 minutes and seek medical advice. For respiratory discomfort, move the person to fresh air.

Remove and clean contaminated clothing before reuse.

Both components contain toxic ingredients that can cause skin irritation with prolonged contact. Avoid contact with the eyes and skin, and do not inhale vapors. This product is a strong sensitizer. Use safety glasses and chemical-resistant gloves. A respirator approved by NIOSH/MSHA for organic vapors is recommended. Ensure adequate ventilation during use.