

AlphaGuard® PUMA Base Coat



High performance, two-component, polyurethane modified methyl methacrylate base resin

FEATURES

PUMA Technology

Low Temperature Applications

Catalyzed Cure

High Solids

Plant Root Resistance

VOC Compliant

BENEFITS

- Unique technology typically provides higher elongation and crack bridging properties than comparable MMA/PMMA technology
- Product can be applied in freezing temperatures.
- Results in faster cure than one-component products
- 100% Solids
- Highly durable system prevents damage caused by plant roots in vegetative roofing installations
- 0 g/L; Can be used anywhere (No VOC restrictions)

DESCRIPTION:

AlphaGuard PUMA Base Coat is a high performance, two-component, polyurethane modified methyl methacrylate waterproofing resin.

BASIC USES:

The AlphaGuard PUMA system is ideal for restoration, repair and waterproofing of a variety of roofing systems and can be used as the primary roofing system in IRMA and vegetative roof assemblies. AlphaGuard PUMA can also be installed as the roofing system in direct to structural concrete applications.. Alpha-Guard PUMA can also be used as a liquid flashing membrane for approved new roofing systems.

PACKAGING:

Available in 6 gallon (22.71 L) container.

COLOR:

Gray

GRADE:

Brush / Roller / Squeegee

POT LIFE:

10 - 15 minutes.

**Pot life dependent on ambient, substrate, and product temperature and the amount of AlphaGuard PUMA Catalyst used.*

STORAGE LIFE:

12 months in unopened containers. Recommended storage conditions are indoors in a ventilated, dry area removed from heat, open flame, ignition sources, and direct sunlight. Storage temperatures should range from 60-70°F (15-21°C) and must not exceed 110°F (43°C).

On the job site, materials should remain on the pallet until use and be stored in a shaded, ventilated area. Materials should be covered with a light-colored, reflective tarp for protection against the elements. Allow for adequate air flow inside the pallets.

Shelf life could be effected if the product is not stored properly.

APPLICATION:

Preparation: Surface must be clean, dry, solid and free of dirt, grease, oil, algae, and any other debris/contaminants.

Allow new concrete to cure for a minimum of 28 days and until moisture,

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APPLICATION:
(continued)

RH, and compressive strength values reach an appropriate level. Concrete surfaces must be shot-blasted to an ICRI 3-6 surface profile.

Metal must be ground to a clean, bare, bright metal surface.

Repairs: If AlphaGuard PUMA is being installed over an existing roof system, all appropriate repairs should be made prior to applying the AlphaGuard PUMA system. Allow suggested cure time of repairs before application.

Reinforcement: AlphaGuard PUMA Base Coat requires full reinforcement with Permafab (polyester membrane) or AlphaGuard Glass Mat.

Mixing: Use a heavy duty power drill with Jiffy Mixer attachment. Cordless drills are not recommended and may not properly mix the materials.

AlphaGuard PUMA Base Coat must be mixed to achieve a uniform distribution and appearance of the product. Once properly mixed, AlphaGuard PUMA Base Coat can be poured off in smaller quantities into a second container. Add the appropriate amount of AlphaGuard PUMA Catalyst to the selected amount of base coat and mix thoroughly until powder catalyst is completely dissolved. Catalyze only the amount of base coat intended to be used within the expected pot life. The amount of AlphaGuard PUMA Catalyst required is based on the amount of base coat used and the ambient temperature (Refer to the mixing chart for proper mixing ratios.).

Application: Apply AlphaGuard PUMA Base Coat at 2½ gals / 100 sq. ft. (40 wet mils) (1 L/m²) minimum. Embed reinforcing fabric into wet coating using a brush or roller until free of voids, wrinkles, air pockets, etc. While coating is still wet, apply AlphaGuard PUMA Base Coat over embedded fabric at 2½ gals / 100 sq. ft. (40 wet mils) (1 L/m²) minimum. Allow to cure prior to applying top coat.

MIXING CHART:

**AG PUMA
BASE COAT
AMOUNT**

ALPHAGUARD PUMA CATALYST AMOUNTS BY TEMPERATURE RANGES

	70-95°F (21-35°C)			60-70°F (15-21°C)			40-60°F (5-15°C)			32-40°F (0-5°C)			< 32°F (< 0°C)		
	2% Catalyst			4% Catalyst			8% Catalyst			12% Catalyst			12% Catalyst + Accelerator		
	oz	lbs	g	oz	lbs	g	oz	lbs	g	oz	lbs	g	oz	lbs	g
½ gal (5.64 lbs) 1.89 L (2.55 kg)	2	0.11	51	4	0.22	102	7	0.45	204	11	0.67	306	11	0.67	306
1 gal (11.28 lbs) 3.78 L (5.11 kg)	4	0.23	102	7	0.45	204	14	0.90	409	22	1.35	613	22	1.35	613
3 gal (33.84 lbs) 11.34 L (15.35 kg)	12	0.68	307	22	1.35	614	43	2.71	1,228	65	4.06	1,842	65	4.06	1,842
6 gal (67.68 lbs) 22.68 L (30.70 kg)	22	1.35	614	43	2.71	1,228	87	5.41	2,456	130	8.12	3,684	130	8.12	3,684

* AlphaGuard PUMA Catalyst amounts listed on this chart are minimum required quantities.

**ACCEPTABLE ROOF SURFACES/
SUBSTRATES:**

Smooth BUR	Gravel BUR	Concrete	Foam	Modified Bitumen	Metal	Single Ply	SPUF	Walls
●		●		●				

COVERAGE RATE:

5 gals / 100 sq. ft. (80 mils) (2 L/m²) in two coats with fabric reinforcement.

LIMITATIONS:

- Not for use over expanded polystyrene, extruded polystyrene, plywood, tongue and groove decks, wood decks, poured in place gypsum, lightweight insulating concrete, lightweight structural concrete, cementitious wood fiber decks, coal tar pitch, gravel surfaced BUR, corrugated metal roof systems, and SPUF roofing substrates.
- Do not apply in falling precipitation or when precipitation is imminent.
- Only apply when ambient temperature is -20°F - 95°F (-28°C - 35°C).

CLEAN UP:

Clean tools immediately after use with AlphaGuard PUMA Cleaner.



AlphaGuard® PUMA Base Coat

PRECAUTIONS:

Use Tremco AlphaGuard PUMA Membrane with adequate ventilation. If the product is applied in enclosed areas without natural ventilation, forced ventilation must be arranged. Avoid strong concentration of vapor as well as direct contact with skin or eyes. Users must read container labels and Safety Data Sheets for health and safety precautions prior to use.

PHYSICAL PROPERTIES:

Physical Property	Test Method	Typical Value
Tensile Strength	ASTM D5147	177 lbf/in (31.1 N/mm)
Elongation	ASTM D5147	199% (Unreinforced) 40% (Reinforced)
Tear Strength	ASTM D5147	178 lbf (80.7 kg)
Hardness	ASTM D2240	93 Shore A
Low Temperature Flexibility	ASTM D7264	Pass @ -26°F (-32.2°C)
Vapor Transmission	ASTM E96	0.23 perms (0.15 metric perms)
Water Absorbtion	ASTM D570	0.2 - 8 hours 0.8 - 24 hours
Static Puncture Resistance	ASTM D5602	56 lbf (25.4 kg)
Crack Bridging	ASTM D5147	Pass - 2mm
Abrasion Resistance	ASTM D4060	270 mg
Dimensional Stability	ASTM D5147	0.11
Hydrostatic Resistance	ASTM D751	413 psi (2.85 MPa)
VOC	ASTM D3960	0 g/L
SRI (White Top Coat)	ASTM D1980	96

CODES & APPROVALS:



MAINTENANCE:

Your local Tremco Roofing Representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventative maintenance are all part of a sound roof program.

TECHNICAL SERVICES:

Your local Tremco Representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications. The services of the Tremco Research Center, which has earned a unique reputation in weatherproofing technology, complement and extend the services of the Tremco Technical Service Staff.



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