

Technical Data Sheet

Polyaspartic Polyurea is an extremely tough optically clear weather resistant 2-component polyurea formulation. It exhibits excellent durability, resistance to abrasion, chemicals and sunlight. It is used primarily in exterior high-wear environments where severe top coating protection is required. This system may also be color tinted. It retains a high dielectric insulator capacity. Polyaspartic Polyurea may be used over diverse types of substrates such as metals, woods, foams, engineering polymers, composites, brick and concrete. A primer may be required depending on type of substrate or conditions thereof to achieve proper bonding performance.



Polyaspartic Polyurea's toughness places it in demanding industries such as power plants, boat building, marine environments, industrial outdoor heavy equipment, commercial flooring, decorative concrete, steel infrastructures, etc.

TECHNICAL APPLICATION DATA

The mix ratio is 1A:1B with gel time up 2 hour pot life depending on ambient air and substrate temperatures. Additional coats may be applied within 6 hours without abrading the surface.



Polyaspartic Polyurea is a two component 100% solids aliphatic formulation which does not contain VOCs.

This system may be applied by a standard 2-component low pressure spray machine or hand-held cartridge gun. Polyaspartic Polyurea is typically applied by squeegee, roller or brush. Coated substrate surfaces must be clean/dry and free of

Polyaspartic Rollable PHYSICAL PROPERTIES			Polyaspartic Fast-Set Sprayable PROPERTIES		
Optical Clarity	Visual	Clear	Optical Clarity	Visual	Clear
Flex Modulus	ASTM D790	250k psi	Flex Modulus	ASTM D790	200k psi
Tensile Strength	ASTM D412	4200 psi	Tensile Strength	ASTM D412	4100 psi
Elongation	ASTM D2256	150%	Elongation	ASTM D2256	150%
Hardness -Shore D	ASTM D785	75	Hardness -Shore D	ASTM D785	50
Abrasion -TaberCS17	ASTM D4060	50 mg/1k cycles	Abrasion -TaberCS17	ASTM D4060	50 mg/1k cycles
Tear Strength	ASTM D624	200 lbs/ linear in.	Tear Strength	ASTM D624	200 lbs/ linear in.

contaminates, dust, etc. Application temperatures range from 40°F to 110°F. Hand batch mixing must thorough with careful attention as to not induce air into the mixed liquid. Functional operation temperature range is from -40°F to 175°F. Final top-coat application surface is glossy smooth. Coverage at 16 mils is 100 sq. ft./ mixed gal.

Adhesion Results of Typical Substrates per ASTM D-4541 Elcometer

Concrete- Primed	>300 psi	Concrete cohesive failure; excellent bonding
Steel- Primed	>1000 psi	Excellent bonding
Wood- Primed	>250 psi	Wood failure; excellent bonding

Preparation of substrate surface prior to the application of a Specialized Industrial Materials System is extremely important to achieve proper system bonding.

Concrete must be fully cured and should be prepared with a sandblasting, diamond grinding or machine sanding depending on the severity of the concrete surface condition. Similar proper preparation must be performed for metals. Primers also require this proper preparation. Always power clean using mild detergent prior to sanding, etc. Call [TechSupport Group for assistance](#) with selecting S.I.M. application system. Also read the [Application Page on this website](#). If patching concrete, use our mineral filled fast-set Acrylic Modified Epoxy applied by trowel. For expansion joints, use Joist Seal applied by hand cartridge dispensing gun. It is always best to perform a test within a small section of the application area prior to full scale engagement.

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