



ES6259 MOISTURE RESISTANT EPOXY ADHESIVE

DESCRIPTION

ES6259 is a versatile epoxy adhesive that provides very good bond strengths to many substrates under a variety of exposure conditions. ES6259 cures to a tough, slightly resilient product, which makes it ideal for bonding dissimilar materials. ES6259 is also an excellent candidate for applications that are exposed to high humidity and water immersion, due to its resistance to brine and fresh water alike.

TYPICAL APPLICATIONS

ES6259 is well suited for a wide variety of commercial and industrial applications where its high bond strengths provide excellent service. ES6259 is a very good adhesive for bonding reinforced plastics to itself and to metal, and for composite structures, due to its tough cure and ability to bond dissimilar surfaces. The moisture resistant nature of ES6259 is such that it will cure even underwater. This feature has enabled it to be used extensively in the repairing of water reservoirs, either underwater or on the surface, and the patching and repairing of drainage ditches, concrete pipe and transite. It has also been used for various assemblies and repairs on offshore drilling rigs, and numerous marine applications.

PRODUCT SPECIFICATIONS

	ES6259 A	ES6259 B	ASTM Method
Color	Yellow	Black	Visual
Viscosity, @77°F, centipoise	12,000-15,000 cps	50,000-60,000 cps	D2392
Specific Gravity, gms./cc	1.60	1.45	D1475
Mix Ratio, By Weight By Volume	100 : 100 100 : 110*		PTM&W
Pot Life, 4 fl. Oz. Mass @ 77°F	60 - 90 minutes		D2471

* 100 : 100 is sufficient for general purpose applications; the 100 : 110 Ratio By Volume should be used for maximum physical properties.

PACKAGING WEIGHTS

	Quart Kit	Gallon Kit	Pail Kit
ES6259 A	3 lb.	12 lb.	60 lb.
ES6259 B	3 lb.	12 lb.	60 lb.
Kit	6 lb.	24 lb.	120 lb.

ES6259 EPOXY ADHESIVE, Page 2

TYPICAL MECHANICAL PROPERTIES

		ES6259 A/B	ASTM Method
Color		Olive-Brown	Visual
Mixed Viscosity, centipoise		Light Paste	D2393
Cure Time,	@77°F @140°F	18 - 24 hours 2 hours	PTM&W
Handling Strength		4 - 6 hours	PTM&W
Cured Hardness, Shore D		84 Shore D	D2240
Specific Gravity, grams, cc		1.52	D1475
Tensile Lap Shear, psi:	Aluminum to Aluminum, @77°F @140°F Steel to Steel @77°F	4,810 psi 2,400 psi 4,960 psi	D1002
Tensile Strength, psi		8,400 psi	D638
Elongation at Break, %		7 %	D638
Tensile modulus, psi		0.29 x 10 ⁶ psi	D638
Flexural Strength, psi		11,200 psi	D790
Modulus of Elasticity		0.34 x 10 ⁶ psi	D790
Compressive Strength, psi		18,700 psi	D695
Compressive Yield Strength, psi		9,600 psi	D695
Dielectric Constant *		3.48	D150
Dissipation Factor *		0.015	D150
* At 1 Megahertz			

DIRECTIONS FOR USE

1. All surfaces to be bonded or patched must be free of dirt, oil, grease, rust and corrosion.
2. For best bond strength, roughen all surfaces to be repaired or bonded. The rougher the surface, the better the bond.
3. Mix A and B components at the proper ratio until uniform in color and consistency. After mixing, ES6259 must be used within one hour.
4. If the area to be patched is underwater, place mixed material in a plastic bag and then take underwater to the area to be patched. Remove ES6259 from bag and displace water from damaged area by pressing the mixed material firmly into the area to be repaired.
5. If area to be bonded is not underwater, apply mixed material to roughened area to be bonded. Press firmly together and let set for 4 hours at 75°F. If necessary, place in a jig or other holding device to prevent movement during initial curing time.
6. When patching holes over 1 inch deep, fill halfway and allow to partially cure for 45-60 min. at 75°F. Then complete the filling of the hole and smooth the surface.

ES6259 Bulletin / ZW-38 / 102003-C1



PTM&W Industries, Inc.

10640 S. Painter Avenue Santa Fe Springs, CA 90670-4092
562-946-4511 800-421-1518 FAX: 562-941-4773
Visit Us At: www.ptm-w.com Send Questions To: info@ptm-w.com