



ES-218 EPOXY SURFACE COAT SERIES

PRODUCT BULLETIN



WHITE, SANDABLE

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DESCRIPTION

ES-218 is white, thixotropic, room temperature cure, sandable epoxy surface coat designed for duplication work. The popular handling properties of ES-218 produce accurate, detailed, chip resistant surface coat duplications in epoxy laminate fabrications.

The versatility of this resin system, when used with ES-218-1 Hardener, also doubles as a chemical resistant epoxy coating used to fill surface texture on composite parts. Typically one application applied using brush or roller is all that is required to fill in the texture or weave in cloth fabric. NOTE: Do not topcoat directly over ES-218-1 composite coating applications. Sand ES-218-1 and use surface primer products as recommended by topcoat manufacturer. Typical applications include: masters, models, patterns, duplicating, engineering tooling, checking and drill fixtures and as a composite coating.

HANDLING CHARACTERISTICS @ 25°C/77°F

	<u>ES-218 R/ES-218 H</u>	<u>ES-218 R/ES-218-1 H</u>
Mix Ratio (parts by weight)	100R/14H	100R/16H
Mix Ratio (parts by volume)	5.9R:1H	5R:1H
Work Life (228-232 gram mass)	22 minutes	16 minutes
Mixed Viscosity	25,000 cps	14,500 cps
Mixed Density	1.39 g/cc	1.28 g/cc
Cure-to-Demold Time	8-12 hours	8-12 hours
Cure-to-Sanding Time	N/A	4-6 hours
Complete Cure	3-5 days	3-5 days
Mixed Color	White	White
Shelf Life Resin (in original unopened containers)	2 years	2 years
Shelf Life Hardener (in original unopened containers)	2 years	2 years

PHYSICAL PROPERTIES (Testing conducted on cured cast bar samples)

Tensile Strength	4,132 psi	5,973 psi
Tensile Modulus	868,900 psi	1,146,000 psi
Tensile Elongation	0.7%	0.6%
Flexural Strength	7,110 psi	10,070 psi
Flexural Modulus	414,800 psi	573,800 psi
Compressive Strength	7,987 psi	13,350 psi
Compressive Modulus	149,600 psi	244,700 psi
Izod Impact Strength	5.7 in-lb/ft	5.1 in-lb/ft
Shore Hardness	83 Shore D	84 Shore D
Heat Deflection Temperature @ 264 psi	46°C/114°F	52°C/167°F
Shrinkage	0.002 in/in	0.002 in/in
Moisture Absorption (ASTM D-570.88)	N/A	0.29%

ES-218 Series Tech/Revised 2/17/10
Supersedes 12/13/06

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