

PRISM™ EP2400

Epoxy; Epoxide
Cytec Industries Inc.

Message:

PRISM™ EP2400 is a single part, 180°C (356°F) curing, toughened liquid epoxy resin system offering simple and flexible processing with the damage tolerance required for composite primary structure.

The value of resin infusion is the ability to design complex geometric parts while leveraging a unitized structure which ultimately leads to a reduction in weight, lower part counts and the elimination of many post-manufacturing processes. The growth in resin infusion drives the demand for new resin and textile solutions which exhibit increased toughness and improved processability.

PRISM EP2400 has an optimized low viscosity/temperature profile allowing injections at temperatures from 70°C (158°F) without the need for excessive heating of resin transfer pipework or high injection pressures. After injection, the resin viscosity decreases to below 20 cP, helping to ensure full fiber wetting.

PRISM EP2400 offers a dry Tg (storage modulus intercept) of 179°C (354°F) and an exceptional wet Tg of 163°C (325°F) following a two-hour cure at 180°C (356°F).

Suggested Applications:

Primary structure applications requiring superior toughness, low viscosity and extended pot-life

Stringer Stiffened Box Covers

Fuselage and Window Frames

Pressure Bulkheads

Passenger and Cargo Door Structures

Engine Containment Cases

Hinge/Brackets/Fittings

General Information		
Features	Flame Retardant	
	Good Compressive Strength	
	Good Processability	
	Good Toughness	
	Heat Cure	
	Low Smoke Emission	
	Low Viscosity	
Uses	Aerospace Applications	
	Fittings	
	Protective Coverings	
	Structural Parts	
Forms	Fabric	
Physical	Nominal Value	Unit
Specific Gravity ¹	1.24	g/cm ³
Mechanical	Nominal Value	Unit
Tensile Modulus ²	3380	MPa
Tensile Strength ³	95.1	MPa
Tensile Elongation ⁴ (Break)	7.2	%
Flexural Modulus ⁵	3590	MPa
Flexural Strength ⁶	164	MPa

Thermal	Nominal Value	Unit
Glass Transition Temperature ⁷	179	°C
CLTE - Flow ⁸	6.1E-5	cm/cm/°C

NOTE

- | | |
|----|-----------------|
| 1. | Neat Resin |
| 2. | Neat Resin |
| 3. | Neat Resin |
| 4. | Neat Resin |
| 5. | Neat Resin |
| 6. | Neat Resin |
| 7. | Neat Resin, Dry |
| 8. | Neat Resin |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

