

**EPL 1012** is a Bisphenol F type epoxy resin. Its low viscosity allows for complete impregnation of reinforcement fibers like glass, carbon, and aramid or mineral powder such as silica, and make it suitable for processing methods such as wet lay-up and RTM. The resulting laminates exhibit excellent mechanical and dynamical properties, and easy machineable.

**Uses:**

- Used for backfilling composition using mineral or metallic fillers and for laminates which require good flexural strength
- Ideal for the construction of laminated structures
- It can be used to make foundry components
- Model and mould making of industrial components.

**Physical Properties:**

Properties	Work Temperature	In low bulk Diameter: 50mm Thickness: 3 mm	In high bulk Diameter: 50mm Thickness: 26 mm
Pot Life	25° C	50 min	20 min
Gel Time	25°C	60 min	24 min
Curing Time	25°C	90 min	25 min
Full Cure  ( up to achieve the maximum strength and resistance)	25°C	7 days	7 days

**Mechanical Properties:**

Properties	Amount	Unit	Standard
Compressive Strength	974	Kgf/cm <sup>2</sup>	ASTM D695M
Compressive Modulus	9371	Kgf/cm <sup>2</sup>	ASTM D695M
Flexural Strength	960	Kgf/cm <sup>2</sup>	ASTM D790M
Flexural Modulus	36454	Kgf/cm <sup>2</sup>	ASTM D790M
Tensile Strength	761	Kgf/cm <sup>2</sup>	ASTM D638M
Tensile Modulus	27890	Kgf/cm <sup>2</sup>	ASTM D638M
Shore Hardness	82	Shore D	ASTM D2240
Impact Resistance	7.850	KJ/m <sup>2</sup>	ASTM D256

*Average values obtained on standard specimens of pure resin / Hardening 24 hr at 23°C + 6 hr at 60°C or 7 days at RT.*

**Thermal Properties:**

Properties	Amount	Unit	Standard
Volume Electrical Strength	1.8*10 <sup>15</sup>	Ohm.cm	ASTM D257
Surface Electrical Strength	9.5*10 <sup>12</sup>	Ohm	ASTM D257
Dielectric Constant	6	-	ASTM D150
H.D.T	80	°C	ASTM D648
Coefficient of Thermal Expansion	6.2*10 <sup>-5</sup>	(°C) <sup>-1</sup>	ASTM D864