

**ELI-CAST FR/476
ELECTRO INSULATING RESIN**

PRODUCT:	A slow setting two component, ambient temperature curing Epoxy Casting Resin	
APPLICATION:	By pouring	
VISCOSITY / 25°C:	Pourable, free flowing liquid Resin: 6 000 – 8 000 mPa.s Hardener: 600 – 700 mPa.s Mixed Resin: 3 500 – 4 000 mPa.s	
MIXING RATIO:	By weight:	100 parts of Resin 25 parts of Hardener
	By volume:	100 ccs of Resin 35 ccs of Hardener
GELTIME / 25°C: (250 g cast)	3 – 4 Hours	
SETTING TIME / 25°C: (250 g cast)	5 – 6 Hours	
EXOTHERM:	Low heat development up to 5 kg mass	
SPECIFIC GRAVITY / 25°C:	Resin:	1.54 – 1.6 g/cm ³
	Hardener:	0.93 – 1.0 g/cm ³
	Mixed Resin:	1.40 – 1.45 g/cm ³
<u>PHYSICAL CHARACTERISTICS</u>		
Hardness Shore D cured 24h / 25°C	80 – 85	
Heat Resistance:	Suitable for applications up to 70°C	
Hardness Shore D	/ 60°C	75
	/ 80°C	55
	/ 100°C	50
Tensile Strength / 25°C (Din 53455)	40 MPa	
Flexural Strength / 25°C (Din 53452)	60 MPa	
Compressive Strength / 25°C (Din 53454)	90 – 95 MPa	

Impact Strength (Din 53453)	4 – 4.5 kJ/m ²
CHEMICAL RESISTANCE	Excellent - to Water, Oil, diluted Acids and good resistance to inorganic Acids and to Alkaline materials at ambient temperatures.
RESISTANCE TO SOLVENTS	Good resistance to: Petrol, Benzine and Alcohols. Poor resistance to: Trichloroethylene, Ketones, Esters. (Individual tests are recommended.)
<u>TYPICAL ELECTRICAL PROPERTIES</u>	
Dielectric Strength at 25°C (Din 53481)	21 kV/mm
Surface Resistivity (VDE 0303) Part 3 (Din 53482)	10 ¹⁴ Ohm/cm
Volume Resistivity (Din 53482)	10 ¹⁵ Ohm/cm
Power Factor (Tan δ) / 25°C (VDE 0303) Part 3	0.01
Dielectric Constant (Din 53483)	4.0
PROPERTIES AND USES:	Eli-Cast FR/476 is primarily used for potting and encapsulating of electrical and electronic units. The very low shrinkage and low heat development and good thermo-shock behaviour even in large casts recommends Eli-Cast FR/476 for the potting of large units, e.g. transformers and magnets.
STORAGE STABILITY:	Dry and cool conditions in sealed packaging: 12 months
TOXICITY:	Non-toxic at ambient temperatures, very low skin irritation potential. However, gloves should be worn and adequate ventilation must be ensured during application.
NOTICE:	The technical specification and/or our technical advice whether verbal, in writing or by trials is given in good faith and based on our test results obtained but without warranty. It does not release the user from the obligation to test the products supplied by us or any third party as to the suitability for the intended application. The application, use and processing of the products are beyond our control and Elite Chemical Industries (Pty) Ltd's legal obligation in respect of any sale of its products shall be determined by the terms of its conditions of sale.