

ELI – DUR FR/766
ELECTRICAL INSULATING RESIN

PRODUCT:	Eli-Dur FR/766 is a flexible, ambient temperature curing, two component, Electrical Insulating Resin with outstanding water resistance and electrical properties.	
DESCRIPTION:	A two pack Polyurethane Resin	
COLOUR:	Resin:	Black
	Hardener:	Brown
	Mixed Colour:	Black
VISCOSITY / 25°C:	Resin:	4000 – 4500 mPa.s
	Hardener:	400 mPa.s
	Mixed:	3000 – 3500 mPa.s
SPECIFIC GRAVITY / 25°C:	Resin:	0.92 – 0.94 g/cm ³
	Hardener:	1.24 g/cm ³
	Mixed:	0.92 – 0.95 g/cm ³
MIXING RATIO:	By weight:	100 parts Resin 28 – 30 parts Hardener
	By volume:	100 parts Resin 22 – 25 parts Hardener
APPLICATION:	By casting	
GELTIME / 25°C: (100g cast)	25 - 30 Minutes	
SETTING TIME / 25°C: (100g cast)	45 - 50 Minutes	
EXOTHERM:	Maximum 60°C	
HARDNESS / 25°C: (After 24 hours cure) (After 7 days cure)	Shore A: 70 Shore A: 90	Shore D: 45
HEAT RESISTANCE:	The product is suitable for applications up to 105°C (short time exposure only)	
ADHESION TO:	Cleaned, roughened Metals – PVC:	Good
	Flame treated Polyethylene:	Satisfactory
ELONGATION:	50 %	
STORAGE STABILITY:	Stored in original packaging under dry and cool condition - 24 months (Containers to be tightly sealed when not in use.)	

TEARSTRENGTH: (Din 53455)	6 MPa
CHEMICAL RESISTANCE TO:	Water, diluted Acids and Alkaline: Good
SOLVENT RESISTANCE:	Aliphatic Hydrocarbons: Good
	Oil, Grease: Satisfactory (Tests are recommended)
	Aromatic Hydrocarbons, Esters, Ketones: Poor (Not resistant)
HYDROLYTIC STABILITY:	Excellent
WATER ABSORPTION / 25°C: (7 days immersion in distilled water) (150 days immersion in distilled water)	Max. 0.1 % Max. 0.5 %
DIELECTRIC STRENGTH / 23°C: (Method 201C)	(2mm thick cast) - 25 kV/mm
SURFACE RESISTIVITY / 23°C:	6×10^{13} Ohm/cm
VOLUME RESISTIVITY / 23°C:	1×10^{15} Ohm/cm
DIELECTRIC CONSTANT / 23°C:	(1 kHz) - 3.55
DISSIPATION FACTOR / 23°C:	(1 kHz): 0.026
PROPERTIES AND USES:	<p>The excellent chemical resistance and electrical properties, resin flexibility and stability under cold/hot/humid - wet conditions makes the product particularly suitable for potting/encapsulation applications of electrical and electronic components required to function under severe environmental conditions</p> <p>The retention of flexibility at low temperatures is a prominent feature of the FR 766 resin. The embedment stress at ambient and low (5°C) temperatures is significantly lower than flexibilised Epoxy or Polyurethane Resins.</p> <p>The FR 766 Resin is particularly suitable for the encapsulation of fragile electrical components in applications that require cushioning properties over a wide range of temperatures.</p>
SUGGESTED APPLICATION AREAS ARE:	Ballasts, circuit embedment, cryogenic potting, high voltage capacitors, transformers, voltage regulators, ignition systems and cable splice encapsulation.

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 Messrs 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.

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