

ELI-CAST FR476 BLACK

ELECTRO INSULATING RESIN

PRODUCT: A slow setting two component, ambient temperature curing Epoxy Casting Resin

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| 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 | 85 – 90 |
| 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 |

TYPICAL ELECTRICAL PROPERTIES

Dielectric Strength at 25°C 21 kV/mm
(Din 53481)

Surface Resistivity 10^{14} Ohm/cm
(VDE 0303) Part 3
(Din 53482)

Volume Resistivity 10^{15} Ohm/cm
(Din 53482)

Power Factor (Tan δ) / 25°C 0,01
(VDE 0303) Part 3

Dielectric Constant 4,0
(Din 53483)

PROPERTIES AND USES: Eli-Cast FR476Black is primarily used for potting and encapsulating of electrical and electronic units.

The very low shrinkage and low heat development and good thermal shock behaviour even in large casts recommends Eli-Cast FR476 Black 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.

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