



TECHNICAL DATASHEET

Product : ELI-CAST FR453 electro-encapsulation / potting resin is a filler extended, two component, ambient temperature curing encapsulating compound.

Colour : Reddish Brown
Mixing Ratio : By Weight - 100 parts resin to 25 parts hardener
: By volume - 100 parts resin to 40 parts hardener
: Mix resin and hardener for 3-4 minutes.

NOTE

: Increases in temperature will shorten the working time, geltime and setting time.
Decreases in temperature will extend the working time, geltime and setting time.

Specific Gravity/ 25°C : Mixed Resin 1,46 - 1,50 g/cm³
Viscosity/ 25°C : Mixed Resin - 2750 mPa.s (27500 centipoise)
Practical Working Time (Pot Life) : 500g mix @20°C : 45 minutes
Geltime/20°C : 500g mix : 60 minutes
Tackfree time/ 20°C : 2mm thick application : 90 minutes
Setting time/20°C : 2mm thick application : 2-3 hours
Flashpoint : > 200°C
Heat Resistance : 100°C continuous (up to 130°C short cycle)

Typical Cured Properties

Hardness after 24 hours : Shore D 70
7 days : Shore D 74
Volume Resistivity : @23°C = 10 X 10¹² Ohm/cm
Dielectric Strength : (Method 210C) 21Kv/mm
Hydrolytic Stability : Excellent
Dielectric Constant : 50 Hz cycle @ 23°C : 5,56

Typical Applications

Once crosslinked, Eli-Cast FR453 produces an ambient temperature curing high grade encapsulating resin with a shore D hardness of 90. Eli-Cast FR453 is used for the protection of electronic components e.g transducers, transformers, sensors, anodes,

L.E.D's, pcb's, electromagnets, power supplies, capacitors, chokes, suppressors, motor windings etc.

Handling Properties

Eli-Cast FR453 shows no dermatitic properties and has a very low irritation potential at room temperature. However, good industrial hygiene must be observed. Details can be found under *Precautions For Use*.

Storage Stability

Eli-Cast FR453 is moisture sensitive. Material must be stored under dry and cool conditions in tightly sealed containers. Prolonged exposure to temperatures in excess of 40°C in storage must be avoided. Shelf Life : 12 months.

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 of testing the products supplied by us or any third party as to the suitability of the intended application. The application, use and processing of the products are beyond our control and Elite Chemical Industries (Pty) Ltd legal obligation in respect of any sale of it's products shall be determined by the terms of it's conditions of sale. PATENT APPLICATION NO. 86/4152.