ELECTRICAL
CABLE JOINT SEALER EPOXY
PLASTICAST E & L

TECHNICAL DATA

1.0 DESCRIPTION

PLASTICAST is a two-part epoxy compound formulated specifically for encapsulating electric cable joints. PLASTICAST forms a strong, waterproof joint, with excellent mechanical and electrical properties, good dimensional stability and inertness to soil and ground water conditions.

PLASTICAST, being slightly flexible and non-brittle will not crack when used for buried joints subject to ground movement.

PLASTICAST is available in two grades:

PLASTICAST E for general work up to 1 litre in volume

PLASTICAST L a low exotherm grade for large joints over 1.5 litres in volume

2.0 PHYSICAL PROPERTIES

Brackets indicate whether Plasticast E or L or both

2.1	Viscosity	Low (both)
2.2	Mix Ratio	1 : 1 by volume (both)
2.3	Pot Life	25 minutes at 20 °C (E) 2 hours at 20 °C (L)
2.4	Minimum Application Temp.	10 °C (both)
2.5	Maximum Casting Thickness	40 mm (E) Practically unlimited (L)
2.6	Shelf Life	2 years in original unopened containers (both)
2.7	Cured Properties (7 day cure, 20 °C)	
2.7.1	Colour	Transparent Amber (both)
2.7.2	Specific Gravity	1.05 – 1.10 (both)
2.7.3	Hardness	90 Shore A, 43 Shore D (E) 76 Shore A (L)
2.7.4	Compressive Strength	18 MPa @ 25% compression – flexible, no failure (E) 10 MPa – flexible, fails at ~50% compression (L)
2.7.5	Tensile Strength	8 MPa (E) 1.7 MPa (L)
2.7.6	Water Absorption (tap water)	2.1 mg/cm3 (24 hrs @ 20°C) – Plasticast E 0.7 mg/cm3 (24 hrs @ 20°C) – Plasticast L Hardness change after water immersion (both): NIL
2.7.7	Oil Absorption (transformer oil)	0.2 mg/cm3 (24 hrs @ 20°C) – Plasticast E 0.8 mg/cm3 (24 hrs @ 20°C) – Plasticast L Hardness change after oil immersion (both): NIL
2.7.8	Operating Temp. Range	-10°C to 100°C (both)

Stratmore
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PLASTICAST E & L

TECHNICAL DATA Continued

2.0 PHYSICAL PROPERTIES (continued)

2.8 ELECTRICAL PROPERTIES

2.8.1	Volume Resistivity @ 20°C	2.4 x 10^{11} ohm.cm (E)	1.8 x 10^{11} ohm.cm (L)
2.8.2	Dielectric Strength @ 50Hz	120 kV.cm $^{-1}$ (E)	130 kV.cm $^{-1}$ (L)
2.8.3	Permittivity at 20°C, 50Hz	2.4 (E)	2.6 (L)
2.8.4	Power Factor at 20°C, 50Hz	0.18 (E)	0.35 (L)

3.0 USES

As well as encapsulating electrical cable joints, PLASTICAST E is also suitable for impregnation of armatures and stators, as well as general electrical encapsulation work.

Plasticast E is an excellent gas dam compound for pressurised telephone cables.

4.0 APPLICATION INSTRUCTIONS

4.1 MIXING. Wear protective gloves and eye protection during mixing and application. Refer to product label and material safety data sheet for complete handling instructions.

Accurately measure required volume of Resin and Hardener, mix THOROUGHLY. Hand mixing is adequate for small volumes. A paint stirrer fitted to a low speed electric drill may be used for larger volumes but care must be taken to avoid air entrapment. During the mixing process scrape the bottom and sides of the container to ensure all components are incorporated.

4.2 CABLE JOINTS. Moulds may either be purpose built or made from any convenient material. Standard junction boxes make ideal moulds for small sized cables. As PLASTICAST is very fluid ensure the mould is sealed against leaks, particularly about the cable entries. Pour mixed PLASTICAST slowly into one end of the mould until required level is obtained.

Do not disturb joint until PLASTICAST has set, normally between 2 and 4 hours for Plasticast E, overnight for Plasticast L.

Setting time will be slower if ambient temperature is low. The setting time is also affected by the nature of the joint and size of mould used. These factors will govern how readily the heat generated during curing is conducted away. Heat will be lost more readily from small moulds resulting in slower set times.

4.3 ELECTRIC MOTORS. Armatures, rotors and stators are easily impregnated with PLASTICAST E providing outstanding electrical performance and durability. The item should be preheated to 50° C and preferably rotated about an inclined axis. The mixed PLATICAST E should be slowly trickled in at the high end to fill all voids. Rotation continues until the PLASTICAST E gels due to the heat of the item.

PLASTICAST E & L

TECHNICAL DATA Continued

4.0 APPLICATION INSTRUCTIONS (continued)

4.4 CLEAN UP. Tools and equipment may be cleaned before hardening commences by washing with water. Clean hands and skin with soap and hot water.

5.0 PACKAGING

PLASTICAST E 400 mL, 1 litre, 2 litre and 4 litre twin packs.

PLASTICAST L 4 litre twin packs.

Each pack contains equal quantities of hardener and resin in separate containers.