

Technical Data Sheet

Electronic & Engineering Materials

ELAN-Tron[®] E 697 Resin
ELAN-Tron[®] C 126 Hardener
(Sterling[®] E 697 Thermopoxy / C 126 Hardener)

Two-Component Epoxy Conformal Coating

ELAN-Tron[®] E 697 / C 126 Epoxy

Product Description

ELAN-Tron[®] E 697 / C 126 is a two-component, high-solids epoxy resin system.

Areas of Application

Conformal coating of printed circuit boards and other electronic and electrical components

Features and Benefits

- Room temperature or low heat cure
- Resistant to chemicals and moisture
- High solids to provide heavy build
- Thixotropic for low run-off
- Long pot life

Application Methods

- Dip
- Brush

Transportation / Storage

Store below 25°C / 77°F in a dry controlled environment out of direct sunlight. This material should be suitable for use stored under these conditions in the original sealed containers for twelve (12) months from the date of shipment.

Failure to store this product as recommended above may lead to deterioration in product performance.

Mix individual components thoroughly before use

Health and Safety

Read and observe precautions recommended in the Material Safety Data Sheet.

Typical Properties of Material as Supplied

Property	Conditions	Value		Units
		ELAN-Tron [®] E 697 Resin	ELAN-Tron [®] C 126 Hardener	
Non-Volatiles	Calculated	> 96	> 96	%
Viscosity - 2 rpm	25°C / 77°F	15,000 - 25,000	33,000 - 63,000	cP
Viscosity - 20 rpm	25°C / 77°F	4,000 - 6,000	6,500 - 12,500	cP
Weight per Gallon	25°C / 77°F	9.4 - 9.7	8.1 - 8.4	pounds
Flash Point	ASTM D93	> 94 > 201	> 94 > 201	°C °F
Mix Ratio	Parts by weight	100	50	
Mix Ratio	Parts by volume	100	58	

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Typical Properties of Mixed Material

Property	Conditions	Value	Units
Gel Time - 250 g	25°C / 77°F	1 - 2	hours

Curing Schedule

Mix Resin and Hardener in specified ratio until homogeneous

Cure 24 hours at 25°C / 77°F. Allow 5 - 7 days to develop full properties.

Alternatively air dry until tack free, followed by a post cure of 4 hours at 65°C / 149°F

Typical Mechanical Properties

Property	Conditions	Value	Units
Glass Transition Temperature	TMA	54	°C
Shore D Hardness	25°C / 77°F	80	

Typical Electrical Properties

Property	Conditions	Value	Units
Dielectric Strength	ASTM D149 - 50 mils	550	volts/mil
Dielectric Strength	ASTM D149 - 50 mils After 24 hours in water	550	volts/mil
Dissipation Factor ASTM D150	1 kHz - 25°C / 77°F	.03	
	1 kHz - 50°C / 122°F	.07	
	1 kHz - 100°C / 212°F	.50	
Dielectric Constant ASTM D150	1 kHz - 25°C / 77°F	3.2	
	1 kHz - 50°C / 122°F	3.6	
	1 kHz - 100°C / 212°F	7.7	
Volume Resistivity - ASTM D257	25°C / 77°F	1.5 x 10 ¹⁴	ohm-cm

The above properties are typical values and are not intended for specification use.

ELANTAS PDG, Inc. warrants the chemical composition of its products within stated tolerances, but does not guarantee that a product will be appropriate for any particular application. Any recommendation, performance of tests or suggestion is offered merely as a guide and is not a substitute for a thorough evaluation by the user. No representative of ELANTAS PDG, Inc. has the authority to offer a warranty that a product will perform satisfactorily in manufacturing a product and no such representation should be relied upon.