

Technical Data Sheet

Electronic & Engineering Materials

ELAN-Tron[®] E 3151

Two-Component Epoxy Adhesive System

ELAN-Tron[®] E 3151

Product Description

ELAN-Tron[®] E 3151 is an unfilled, 100%-solids, two-component epoxy resin system.

Areas of Application

- Excellent adhesive for bonding dissimilar surfaces
- Provides a shock-resistant, semi-rigid, moisture-proof, gas-tight seal between plastics and metallic or other surfaces

Features and Benefits

- Suitable for continuous service up to 82°C (180°F)
- Resistant to acids, alkalis, corrosive salts, lubricating oils, acetone, alcohols and jet fuels

Application Methods

Brush or roller

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 the product as recommended above may lead to deterioration in product performance.

Mix individual components thoroughly before use.

Health / Safety

Refer to the Material Safety Data Sheet.

Typical Properties of Material as Supplied

Property	Conditions	Value		Units
		ELAN-Tron [®] E 3151 Resin	ELAN-Tron [®] C 3151 Hardener	
Viscosity	25°C / 77°F	800 - 1600	2000 - 5000	cP
Weight per Gallon	25°C / 77°F	9.2 - 9.6	8.0 - 8.4	pounds
Flash Point	ASTM D93	> 94 > 201	> 94 > 201	°C °F
Mix Ratio	Parts by weight Parts by volume	100 100	50 57	

Surface Preparation

All bonding surfaces must be clean of oils and greases to obtain maximum adhesion. Degreasing, solvent wipe or chemical cleaning is recommended for metals. For plastic, cleaning with denatured alcohol or solvent is usually adequate. Any release agent deposited on the plastic during manufacturing must be removed. In some cases the plastic may require flame or corona treatment to remove surface sheen.

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Application / Curing Schedule

Mix Resin and Hardener in ratio prescribed above until homogeneous. Pot life is 45 - 60 minutes in ½-pound batches. Do not mix more material than can be used for the job at hand.

Allow to cure for 24 hours at room temperature.

For maximum adhesion, a post-cure of two hours at 65°C / 180°F or one hour at 93°C / 200°F is recommended.

The cure schedules above are based on time after the unit reaches the specified temperature and are recommendations only. The user is responsible for determining the optimum cure conditions for his application.

Typical Mechanical Properties

Property	Conditions	Value	Units
Lap Shear Strength Aluminum - aluminum	25°C / 77°F	2400	psi
Lap Shear Strength Aluminum - rigid vinyl	25°C / 77°F	500	psi

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.