

ELAN-Cast[®] resins for Industrial Motor Protection



Industrial Motor Protection

Product Summary

ELAN-*Cast*[®] E and ELAN-*Cast*[®] P resins provide electrical insulation with superior environmental protection in stator potting or encapsulation applications.







Product Uses

- Molded Stators
- Submersible Pumps
- Severe Duty Motors
- Motors up to 5 hp

Application Methods

Potting
Encapsulation

Product Characteristics at a Glance

		Mixed Viscosity cP at 25°C	Mix Ratio (by weight)	Glass Transition Temperature (Tg)	Shore Hardness	Gel Time at 25°C (minutes)	Cure Schedule for Optimum Properties	Thermal Conductivity W/m.K	Maximum Service Temperature (IEC 60085)
ELAN-Cast [®] E 295 Black Resin ELAN-Cast [®] C 295 Hardener	Two-component, filled epoxy resin system. Heat cure. Semi-rigid. 1:1 mixing ratio (by weight).	50000 - 70000	100 : 100	23 - 28°C	65 - 70	150 - 180 at 125°C	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.20 - 0.30	155°C
ELAN-Cast ^e E 2154 Orange Resin ELAN-Cast ^e C 2154 Hardener	Two-component, filled epoxy resin system. Heat cure. Excellent flexibility in thermal cycling. Consistent dielectric properties up to 180°C.	12000 - 18000	100 : 33	2 - 8°C	62 - 67 D	7 - 13 at 125℃	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.50 - 0.60	155°C
ELAN-Cast [®] E 805 Black Resin ELAN-Cast [®] C 383 Hardener	Two-component, filled, epoxy resin system. Room temperature / low heat cure. Semi-rigid, for encapsulation of stators.	600 - 1000	100 : 17	40 - 45°C	73 - 77 D	70 - 90	24 h at 25℃ + 15 h at 60℃	0.30 - 0.35	155°C
ELAN-Cast* E 617 FR Resin ELAN-Cast* C 161 FR Hardener	Two-component, flame retardant, filled epoxy resin system. Heat cure. 1:1 mixing ratio (by weight). Low shrinkage and good thermal shock resistance for large transformers.	50,000 - 70,000 4600 - 6600 @ 55°C	100 : 100	35 - 40°C	75 - 80 D	22 - 32 at 125°C	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.37 - 0.43	155°C
ELAN-Cast [®] E 4260 Black Resin ELAN-Cast [®] C 321 Hardener	Two-component, filled, epoxy resin system. Room temperature / low heat cure. High thermal conductivity. Suitable for use at Class H temps.	1500 - 2500	100 : 10	55 - 60 °C	85 - 90 D	400 - 500	24 h at 25°C + 15 h at 60°C	0.65	180°C
ELAN-Cast [®] E 88 Resin ELAN-Cast [®] C 89 Hardener	Two-component, rigid, filled epoxy resin system. Heat cure. UL 94 V0 listed. High heat deflection temperature and excellent thermal conductivity.	50000 - 70000 400 - 800 @ 90°C	100 : 114	97 - 103°C	85 - 90 D	7 - 13 at 125℃	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.95 - 1.05	180°C
ELAN-Cast ^e E 81 Black Resin ELAN-Cast ^e C 81 Hardener	Two-component, filled epoxy resin system. Heat cure. 1:1 mixing ratio (by weight). Thermal shock resistant. UL system listed.	10000 - 15000	100 : 100	85 - 90°C	85 - 90 D	3 - 5 at 125°C	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.60 - 0.70	155°C
ELAN-Cast [®] E 471-5LL Black Resin ELAN-Cast [®] C 471-5LL Hardener	Two-component, filled epoxy resin system. Enhanced chemical resistance with low stress, room temperature / low heat cure. UL System listed. Flame retardant, UL 94 V0 listed.	2000 - 3000	100:15	48 - 53°C	75 - 85 D	450 - 500	168 h at 25°C or 4 h at 80°C	0.50 - 0.60	130°C
ELAN-Cast" P 300S-65F1-45 Resin MEK Peroxide 9%	Two-component, filled polyester resin system. Room temperature / low heat cure. Moisture- resistant. Good thermal conductivity.	3000 - 9000	100 : 0.35	35 - 40°C	53 - 58 D	40 - 50	24 h at 25°C or 2 h at 80°C	0.65 - 0.75	180°C
ELAN-Cast [®] P 82-5001 Resin	Single-component, filled resin system. Heat cure. Semi-flexible. Moisture and thermal shock resistant for severe duty applications.	20000 - 30000 10000 - 20000 @ 50°C	-	42 - 48°C	46 - 50 D	5 - 15 at 125°C	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.70 - 0.80	180°C

Alternate cure schedule may be possible for your application. Consult with your ELANTAS PDG representative.

For More Information Ask For Our Technical Data Sheets.

ELANTAS PDG, Inc.

ELANTAS Electrical Insulation

Around the world, ELANTAS Electrical Insulation companies are respected as market leaders in the development and manufacturing of impregnating resins (varnishes), wire enamel, potting compounds and casting resins for a number of electrical, industrial, aerospace and civil applications. No matter what your challenge, be assured that ELANTAS Electrical Insulation products will meet your most demanding needs.

ELANTAS PDG, Inc.

Today, ELANTAS PDG, Inc. is recognized as the premier global supplier of specialty polymers for the electrical and electronic industries. ELANTAS PDG, Inc. is a member of ALTANA's ELANTAS Electrical Insulation Division based in Wesel, Germany.

With the support of ALTANA and by working with other ALTANA divisions, we offer a unique global approach to research, manufacturing and service that translates into more creative solutions, dependable supply and consistently high quality.

Many ELANTAS PDG, Inc. products are recognized as components of electrical insulation systems in accordance with UL 1446. ELANTAS PDG, Inc. is registered to ISO 9001:2000 and ISO/TS 16949:2002- Second Edition.

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ELANTAS PDG, Inc. headquarters in St. Louis, Missouri

ELANTAS Electrical Insulation companies are strategically located throughout the world to meet the primary insulation, secondary insulation and electronic and engineering materials needs of our customers.

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Rev 5-13