

ELAN-Cast<sup>®</sup> resins for  
**Power Generation and  
Distribution**

# Power Generation and Distribution

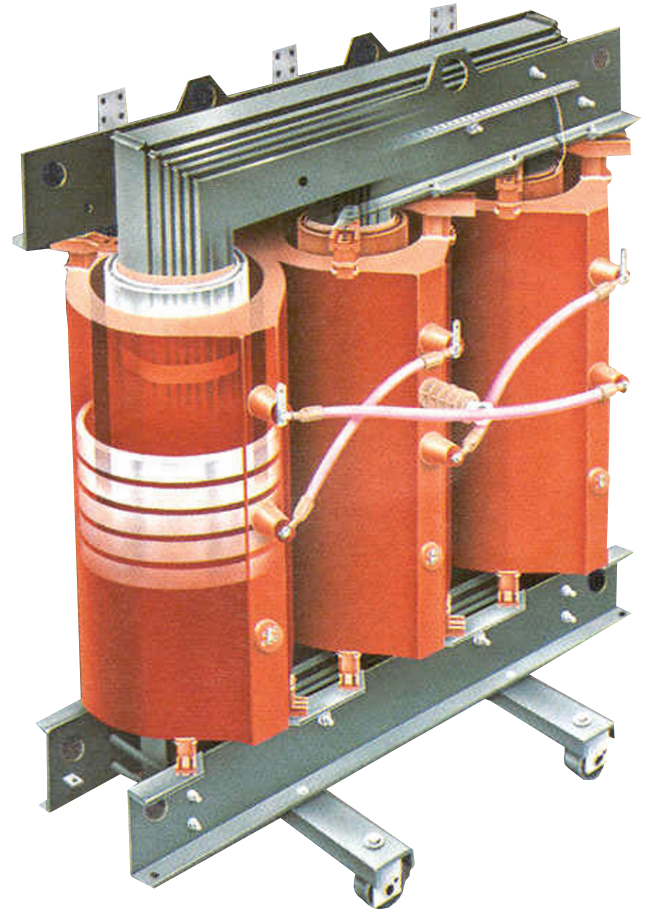
## Product Summary

**ELAN-Cast® E** epoxy resins are two-component systems that provide electrical insulation with superior environmental protection.

Some are suitable for high temperature applications and offer excellent thermal shock resistance.

## Product Uses

- Dry Type Transformers
- Resin-Cast Transformers
- Large Motors
- Generators
- Outdoor Devices



# Application Methods

- Vacuum Casting



## Product Characteristics at a Glance

		Mixed Viscosity cP at 25°C	Mix Ratio (by weight)	Glass Transition Temp (Tg)	Coefficient of Thermal Expansion (ppm/°C) before/after Tg	Gel Time 125°C (minutes)	Cure Schedule for Optimum Properties	Thermal Conductivity W/m.K	Max Service Temp (IEC 60085)
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.	50000 - 70000 400 - 800 @ 90°C	100 : 114	97 - 103°C	45 / 155	7 - 13	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.95 - 1.05	180°C
ELAN-Cast® E GRC 81 Black Resin ELAN-Cast® C GRC 81 Hardener	Two-component, fast-setting, filled epoxy resin system. 1:1 mixing ratio (by weight). Heat cure. Thermal shock resistant. UL system listed.	10000 - 15000	100 : 100	85 - 90°C	40 / 140	3 - 5	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.60 - 0.70	155°C
ELAN-Cast® E 494 RQ Red Resin ELAN-Cast® C 494 RQ Hardener	Two-component, filled epoxy resin system. 1:1 mixing ratio (by weight). Heat cure. Suitable for high voltage distribution transformers, chokes, etc. Thermal shock resistant. UL system listed.	25000 - 30000	100 : 100	35 - 40°C	85 / 235	12 - 18	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.40 - 0.50	180°C
ELAN-Cast® E 617 FR Resin ELAN-Cast® C 161 Hardener	Two-component, filled epoxy resin system. 1:1 mixing ratio (by weight). Heat cure. UL 94 V0 listed.	50000 - 70000 4600 - 6600 @ 55°C	100 : 100	35 - 40°C	75 / 200	22 - 32	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.35 - 0.45	155°C
ELAN-Cast® E 43-5701 Resin ELAN-Cast® C 402 Hardener	Two-component, semi-rigid, filled epoxy resin system. Heat cure. Resilient for casting large collector rings. Suitable for outdoor applications.	12000 - 17000	100 : 25	40 - 46°C	80 / 175	25 - 30	4 h at 80°C + 4 h at 120°C + 4 h at 150°C	0.58 - 0.68	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 and ISO/TS 16949.

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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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