



ELAN-Tron[®], ELAN-Cast[®], and Bectron[®] resins for **Electronic Protection**

Electronic Protection

Product Summary

ELAN-Tron® U polyurethane resins provide electrical insulation with superior environmental protection. The two-part systems cure at room temperature or with low heat. Flexibility and a low exotherm minimize stress on sensitive components.

They are typically dispensed with meter-mix equipment and are available in filled and unfilled versions.

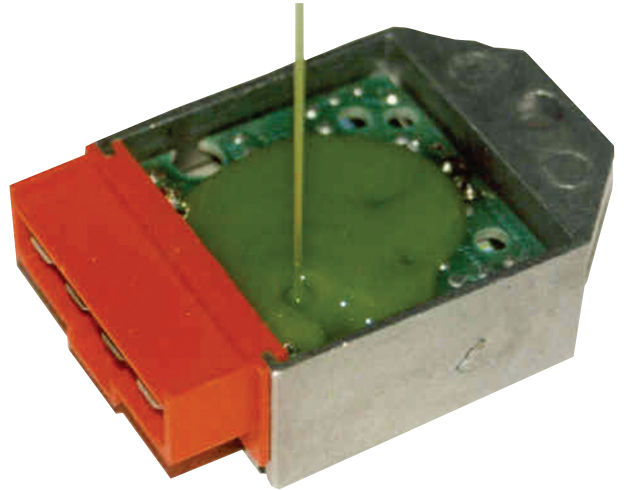
ELAN-Cast® E resins provide electrical insulation with the enhanced chemical resistance of an epoxy.

Bectron® PK resins are single-component, low heat-cured polyurethanes offering excellent flexibility for protection of sensitive electronic components.



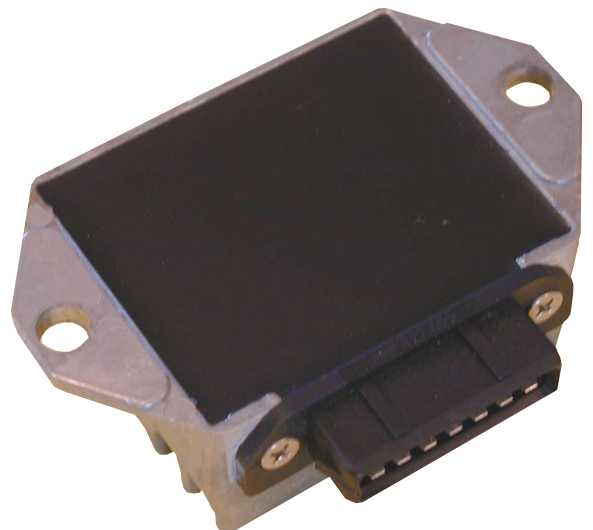
Application Methods

**Vacuum Potting • Meter-Mixing
Atmospheric Potting**



Product Uses

**Automotive Electronics
Sensors & Actuators
Safety Devices
Control Modules
Transducers**



Product Characteristics at a Glance

		Mixed Viscosity cP at 25°C	Mix Ratio (by weight)	Glass Transition Temp (Tg)	Shore Hardness	Coefficient of Thermal Expansion (ppm/°C) before/after Tg	Gel Time at 25°C (minutes)	Cure Schedule for Optimum Properties	Maximum Service Temp (IEC 60085)
ELAN-Tron® U 225 Black Resin ELAN-Tron® UH 510S Hardener	General-purpose, unfilled polyurethane resin system. Low viscosity.	275 - 350	100 : 43	5 - 10°C	60 - 70 A	140 / 310	12 - 16	72 h at 25°C or 2 h at 80°C	130°C
ELAN-Tron® U 510S Brown Resin ELAN-Tron® UH 510S Hardener	Unfilled polyurethane resin system. Designed for automotive applications. Flexible to -40°C or below. Resistant to hydrolysis (85°C / 85% RH).	3200 - 4200	100 : 24	< -60°C	50 - 60 A	n.a. / 200	20 - 25	72 h at 25°C or 2 h at 80°C	130°C
ELAN-Tron® U 510S-6 Thixo Resin ELAN-Tron® UH 510S Hardener	Unfilled polyurethane resin system, available in black or brown. Designed for automotive applications. Flexible to -40°C or below. Excellent adhesion to plastic and metal. Thixotropic for controlled application. Resistant to hydrolysis (85°C / 85% RH).	6500 - 8500	100 : 24	< -60°C	50 - 60 A	n.a. / 200	5 - 7	72 h at 25°C or 2 h at 80°C	130°C
ELAN-Tron® U 596LV Black Resin ELAN-Tron® UH 510S Hardener	Unfilled polyurethane resin system. Low application viscosity. Designed for automotive applications. Flexible to -40°C or below. Resistant to hydrolysis (85°C / 85% RH).	800 - 1500	100 : 29	< -60°C	40 - 50 A	n.a. / 300	5 - 7	72 h at 25°C or 2 h at 80°C	130°C
ELAN-Tron® U 6592 Black Resin ELAN-Tron® UH 6592 Hardener	Filled polyurethane resin system. Flexible to -40°C or below. Thermal shock resistant (>10 cycles -55 to 155°C).	5000 - 10000	100 : 12.5	< -60°C	55 - 65 A	n.a. / 245	45 - 80	168 h at 25°C or 4 h at 80°C	130°C
ELAN-Tron® U 4106 Black Resin ELAN-Tron® UH 510S Hardener	General-purpose, filled polyurethane resin system. Flexible.	2000 - 3000	100 : 33.3	5 - 10°C	75 - 85 A	135 / 280	30 - 50	168 h at 25°C or 4 h at 80°C	130°C
ELAN-Tron® U 6752 FR White Resin ELAN-Tron® UH 510S Hardener	Filled polyurethane resin system. Low shrinkage. Excellent thermal conductivity. Flame retardant per UL 94 V0. Flexible to -20°C.	3000 - 5000	100 : 15	< -20°C	70 - 90 A	55 / 160	3 - 7	72 h at 25°C or 2 h at 80°C	130°C
ELAN-Cast® E 471-5LL FR Black Resin ELAN-Cast® C 471-5LL Hardener	Two-component, filled epoxy resin system. UL System listed. UL 94 V-0 listed. Enhanced chemical resistance with low stress, room temperature / low heat cure.	2000 - 3000	100 : 15	48 - 53°C	75 - 85 D	40 / 195	450 - 500	168 h at 25°C or 4 h at 80°C	130°C
Bectron® PK 4340 Resin	Black, single-component, flexible polyurethane resin system. For selective coating of SMD and other sensitive components on printed circuit boards and ceramic substrates. Excellent thermal cycling performance from -60°C to +125°C. Used as dam in dam-and-fill application.	8000 - 11000	-	< -50°C	60 - 80 A	n.a. / 200	3 - 7 at 80°C	60 - 70 m at 80°C	130°C
Bectron® PK 4332 Resin	Black, single-component, very flexible polyurethane resin system. For selective coating of SMD and other sensitive components on printed circuit boards. Also used as a casting resin for electronic components and sensors. Excellent thermal cycling performance from 60°C to +125°C.	4500 - 6500	-	< -60°C	25 - 45 A	n.a. / 200	10 - 15 at 80°C	70 - 90 m at 80°C	130°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

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