

# ULTRATHERM™ resins

## Polyimide Resins

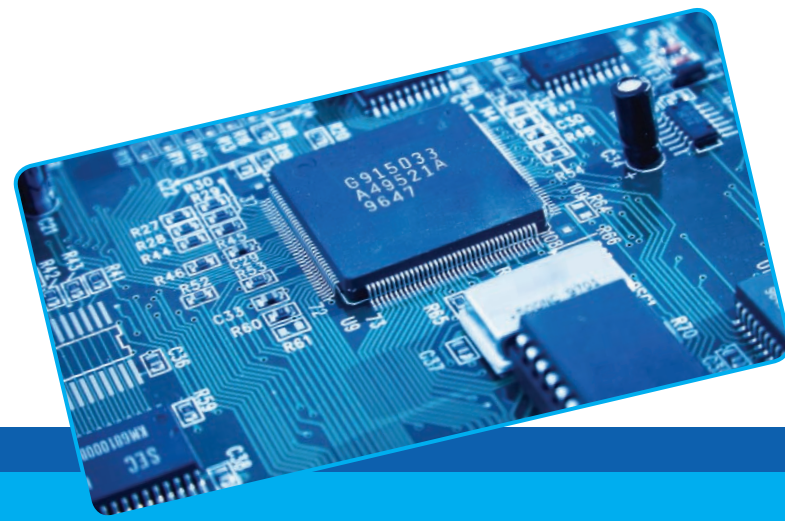
# ULTRATHERM™

## Product Summary

ULTRATHERM™ resins are high performance polyimide wire enamels. Applied in the form of a polyamic acid solution, the resin is converted with heat to a continuous film coating resulting in excellent resistance to radiation, chemicals, and cryogenic temperatures.

ULTRATHERM™ resins meet the requirements of NEMA MW 16. Ultratherm™ is intended for die application on medium to large (AWG 14-28 / 1.63-0.32 mm) wire using vertical enameling equipment. It can be used on horizontal enameling equipment after thinning with solvent.

ULTRATHERM™ resins can also be used as a high temperature binder or as a coating for inorganic substrates.



## Application Methods

### Die Application on medium to large wire



## Product Characteristics at a Glance

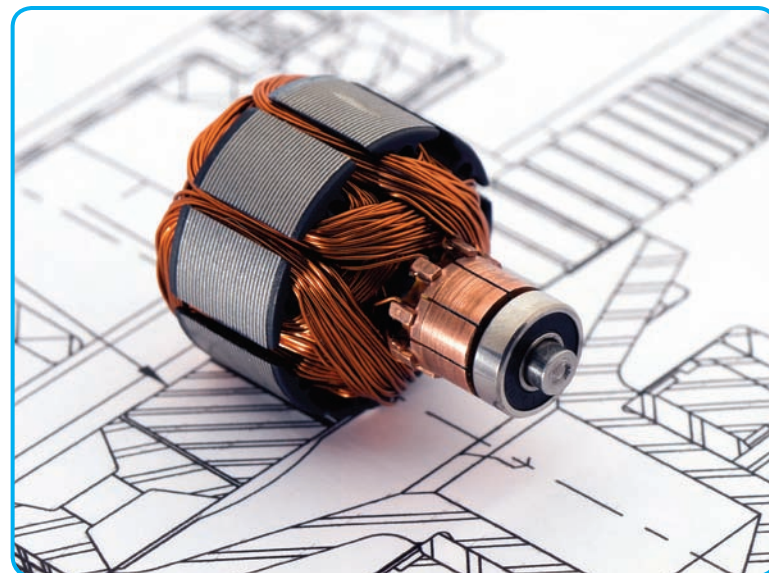
|                       |   | <b>Polyimide Chemical Basis</b> | <b>Diameter Range (mm)</b> | <b>Solids Content 2g-2h-200°C</b> | <b>Viscosity cPs mPa.s 25°</b> | <b>Wire Diameter (mm)</b> | <b>Cut Through NEMA °C</b> | <b>Tangent Delta °C</b> | <b>Thermal Index °C</b> |
|-----------------------|---|---------------------------------|----------------------------|-----------------------------------|--------------------------------|---------------------------|----------------------------|-------------------------|-------------------------|
| Ultratherm™ A 828-15  | High-temperature, excellent flexibility | Type I                          | 0.32 - 1.63                | 15 ± 1%                           | 5000 - 7500                    | 1.02                      | >500                       | 280                     | 241                     |
| Ultratherm™ A 1837-15 | High-temperature                        | Type I                          | 0.32 - 1.63                | 14.5 ± 1%                         | 2000 - 3000                    | 1.02                      | >500                       | 280                     | 241                     |
| Ultratherm™ D 701-20  | High-temperature                        | Type II                         | 0.32 - 1.63                | 20 ± 1%                           | 400 - 900                      | 1.02                      | >500                       | 285                     | 248                     |
| Ultratherm™ D 701-27  | High-temperature                        | Type II                         | 0.32 - 1.63                | 27 ± 1%                           | 6000 - 9000                    | 1.02                      | >500                       | 285                     | 248                     |

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

For More Information Ask For Our Technical Data Sheets.

## Product Uses

- Aviation
- Electronics
- Medical Tubing
- High Temp Binders



# 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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