

## Finishing Varnishes for Electrical Applications

ELANTAS Europe with production sites in Germany and Italy is part of the division ELANTAS Electrical Insulation of the ALTANA group. As a leading manufacturer of insulating and protective materials for the electrical and electronics industry our portfolio includes wire enamels, impregnating resins and varnishes, casting and potting resins, electronic coatings, adhesives and flexible electrical insulation materials. In addition, we supply materials for other application areas such as special coatings, printed electronic products as well as tooling and composite materials.

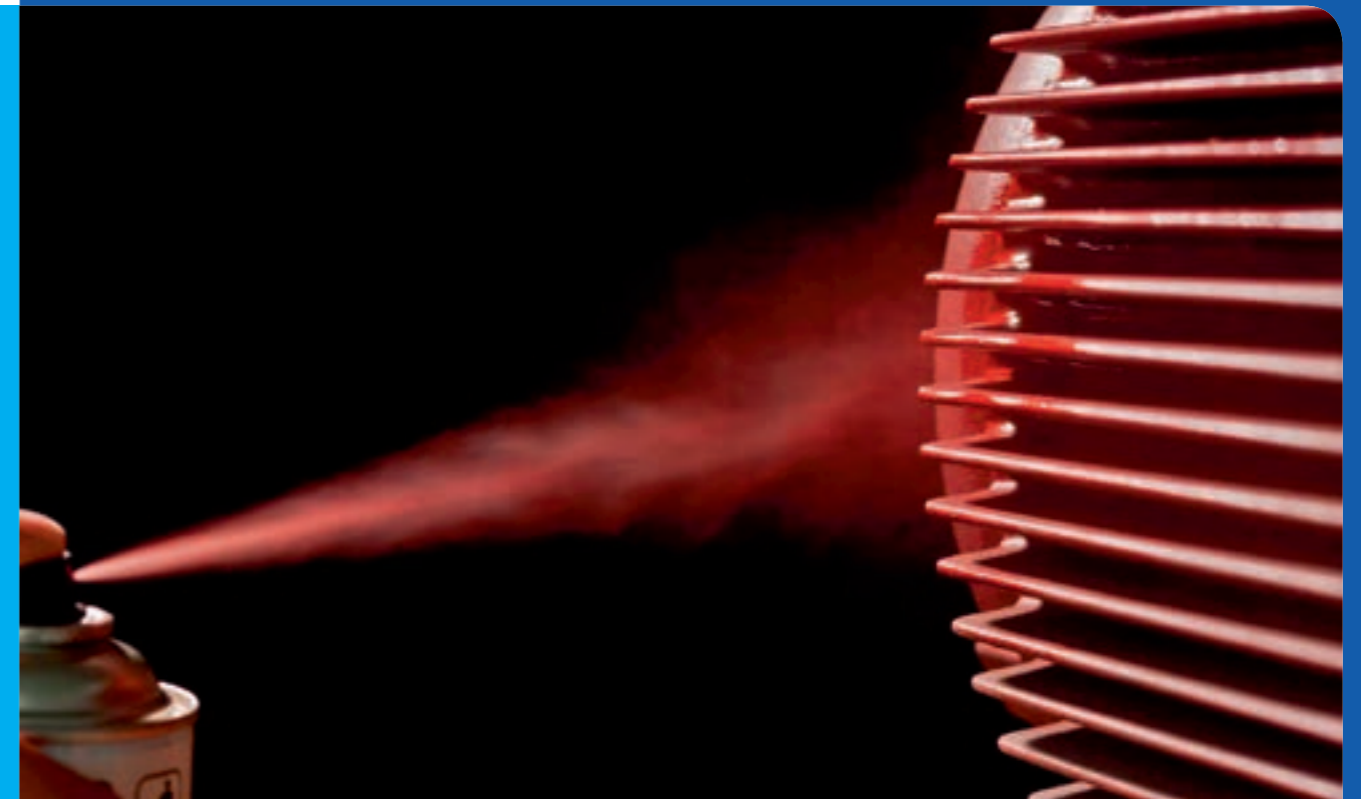
**ELANTAS EUROPE S.R.L.**  
Strada Antolini, 1  
43044 Collecchio, Italy  
Tel. +39 0521 304777

**ELANTAS EUROPE S.R.L.**  
Via San Martino,6  
15028 Quattordio, Italy  
Tel. +39 0131 773870

**ELANTAS EUROPE GMBH**  
Grossmannstr. 105  
20539 Hamburg, Germany  
Tel. +49 40 789460

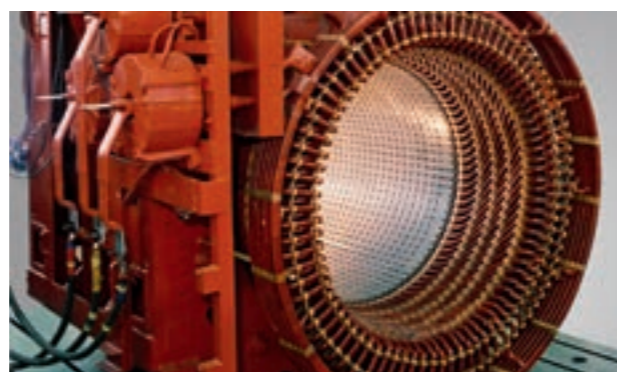
**ELANTAS EUROPE GMBH**  
Manchester Sales Office  
Keate House, 1 Scholar Green Road  
Cobra Court  
Manchester M32 0TR, United Kingdom  
Tel. +44 161 8641689

[www.elantas.com/europe](http://www.elantas.com/europe) · [impregnation.elantas.europe@altana.com](mailto:impregnation.elantas.europe@altana.com)



Elmotherm® and Aquanel® Finishing Varnishes are one or two component products specifically designed for the protection of wire wound components. Their excellent resistance to moisture and chemicals guarantees the best properties and highest durability throughout the entire operating time.

## Finishing Varnishes for Electrical Applications



Elmotherm® and Aquanel® Finishing Varnishes from ELANTAS Europe are designed for operation in the harshest environments. Whenever your goods are exposed to moisture, liquid and gaseous chemicals or dirt-protection Elmotherm® and Aquanel® Finishing Varnishes ensure the highest durability. Our portfolio of finishing varnishes includes solutions for all application requirements. Standard uses are the protection of

- motors
- generators
- transformers.

### Convincing Performance

Varnishes consist of a polymeric binder and a solvent – their compositions define the final properties of the product. As we do not want to leave our products properties to chance, we manufacture and formulate binder and solvent ourselves. Your benefit: highest product quality with every supply. Based on modified alkyd or alkyd-polyurethane resins, all Elmotherm® and Aquanel® Finishing Varnishes are drying at room temperature. Due to the good wetting by the finishing varnishes your product will get the best protection against all types of aggressive environment. Owing to their very good shelf life, Elmotherm® and Aquanel® Finishing Varnishes allow long-term application in production or repair workshops.

### Application Methods

Finishing varnishes are applied after the impregnation process with insulating materials, by dipping, brushing or spraying. To simplify the coating by spraying we offer some types of finishing varnishes in spray cans, too. Elmotherm® and Aquanel® Finishing Varnishes are dried at ambient temperature by standard. To accelerate the process, the applied varnish can also be dried in ovens at up to 80 – 100 °C.

Product	Viscosity	Temperature Index	Typical Cure Schedule	Description (Ex Website /2016)
Elmotherm® F 93 A+B	10 – 20 s ISO Cup 6 mm 23 °C	180	24 h / 23°C or 2 h / 100°C	Two component, solvented, finishing varnish, room temperature curing, very good film forming, excellent resistance to chemicals, available as colourless or oxide red. For dip, brush or spray application.
Elmotherm® FS190	37 – 43 s ISO Cup 6 mm 23 °C	155	24 h / 23°C or 2 h / 100°C	Single component, alkyd resin based, solvented finishing varnish, very good film forming, good resistance to moisture and chemicals, available colourless or red oxide. For dip, brush or spray application.
Elmotherm® 009-0008	100 – 125 s B4 Cup 21 °C	180	1 h / 23°C or 30 min / 80°C	Single component, UL recognised, alkyd resin based, solvented finishing varnish, fast air drying, available in a range of colours, colourless, golden, red oxide, black, grey and white. For dip, brush or spray application.
Elmotherm® VA 160	25 – 35 s Ford 4 Cup 25 °C	155	24 h / 25°C or 2 h / 80°C	Single component, UL recognised, alkyd resin based, solvented finishing varnish, fast air drying, available colourless or red oxide. For dip, brush or spray application.
Aquanel® H 2001	300 – 500 mPa.s 25 °C	180	3 h / 23°C	Single component, UL recognised, water based, epoxy modified varnish, low VOC. Good bond strength, moisture and chemical resistance. Suitable for motors, coils and transformers. For dip and brush application.
Aquanel® H 2002	1100 – 1300 cps Brookfield 25 °C	180	3 h / 23 °C	Single component, UL recognised, water based, epoxy modified varnish, red pigmented version, low VOC. Good bond strength, moisture and chemical resistance. Suitable for motors, stators and coils. For dip and brush application.

This is only a selection of our product portfolio, more products are available on request.