

## Product Information

### V1630FS series

E75225

Air Dry Solvented Varnish  
Electrical Insulation system  
Dip & Bake / Spray / Brush

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## Product Description

Elantas Zhuhai VIKING V1630FS is a very fast setting, clear air dry, vinyl toluene, vegetable oil, modified insulating varnish.

It is thinned with low solvency thinner and can therefore be used with all types of enameled magnet wire. It has minimal effect on electrical tapes.

V1630FS has good solvent, water and ultra-violet light resistance. Because it is thermoplastic, it can be soldered without removing the film in printed circuit and other applications.

V1630FS gives a bright surface finish, excellent protection against leakage currents and is particularly useful for protecting metal surfaces against oxidation. It is compatible with most insulation systems and has good chemical and water resistance.

Having the same resin and solvent base, V1630FS can also be supplied in clear and black versions - Viking V1630FS Black is used for applications where resin visibility / aesthetic finishes are required.

V1630FS is UL recognised in file number E75225 and has the many associated insulation systems ranging from class A to class H - please contact Elantas Zhuhai Technical Service for more information.

## Areas of Application

The preferred applications for V1630FS series are via conventional dip and brush / spray application for:

- Stators
- Transformers
- Coils
- Printed Circuit Boards

Please note that this product is not recommended for the impregnation of deep section windings.

## Processing

V1630FS is mainly used for impregnating components at ambient temperatures. Coated components can, however, be forced dried at elevated temperatures up to a maximum of 60 - 80°C.

Application of V1630FS can be by dip, flood, spray or brush.

It is essential to ensure that tanks and containers of V1630FS remain sealed or well-covered to minimise solvent loss and retain storage stability.

The viscosity of the V1630FS series should be monitored regularly with reference to viscosity versus temperature graphical representations which are available upon request from ELANTAS Zhuhai technical service.

## Packaging

V1630FS is currently sold in 15kg & 160kg containers for ease of use.

## Health & Safety

Refer to Elantas Zhuhai Material Safety Data Sheet (MSDS) for V1630FS.

## Shelf life

12 months  
(in unopened containers stored below 25°C).

**Properties of component as supplied**

Property	V1630FS Clear	V1630FS Black
VISCOSITY @ 25° C Brookfield	30 - 70CPS	90 - 110CPS
COLOUR	CLEAR BROWN	OPAQUE BLACK
NON-VOLATILE CONTENT	34 - 36%	38 - 40%
GLASS CURE @ RTP	<15 MINUTES	<20 MINUTES
REDUCER (THINNER)	S002 VM&P NAPHTHA	S002 VM&P NAPHTHA
	(MEETS RULE 66)	(MEETS RULE 66)

**Mechanical Properties**

BOND STRENGTH (ASTM D2519)	25°C	107N
	100°C	15 N

**Electrical Properties**

DIELECTRIC STRENGTH (ASTM D115)	3300-3400 V/MIL (DRY)
	2300-2500 V/MIL (WET)

**Chemical Properties**

DIP TANK STABILITY	GOOD
COMPATIBILITY WITH WIRE ENAMELS AND TAPES	GOOD
SOLVENT RESISTANCE INCLUDING FLUOROCARBONS)	EXCELLENT (IF CURED 30MINUTES 135°C)
MOISTURE RESISTANCE	GOOD
UV LIGHT RESISTANCE	GOOD
SOLDERABILITY	GOOD

**Thermal Properties**

TEMPERATURE CLASS (ASTM D3251)	CLASS A (105°C)
	CLASS B (130°C)
	CLASS F (155°C)
	CLASS H (180°C)

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