

Product Information B-277-2



Air Dry Solvented Varnish Electrical Insulation system Dip & Bake

ELANTAS ZHUHAI CO LTD.

Fine Chemical Area Gaolan Port Economic Zone Zhuhai Guangdong P.R. China 519050

Tel: +86 756 771 0411 Fax: +86 756 771 0416

www.elantas.com



Product Description

Elantas Zhuhai B-277-2 is a solvented, alkyd resin based, air-drying, up to class '180°C' varnish with excellent electrical properties, good tank stability and anti-tracking qualities and incorporating a "user friendly" fungicide.

B-277-2 gives a bright surface finish, excellent protection against leakage currents and is particularly useful for protecting metal surfaces against oxidation.

B-277-2 is an ideal impregnant for small transformers and coils where a rapid air-drying film is required. This product is not recommended for the impregnation of deep section windings.

B-277-2 is compatible with most insulation systems, has good chemical and water resistance, has a thermal ratings from 130°C to 180°C and is **UL listed under the Underwriters Laboratories OBOR2 File E314793 volume 3.**

Areas of Application

The preferred applications for B-277-2 series are via conventional dip and bake application for:

- Stators
- Transformers
- Coils

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

Processing

B-277-2 is generally suitable for impregnating components at ambient temperatures. Coated components can, however, be forced dried at elevated temperatures up to a maximum of 110°C.

Cure characteristics

25°C 60-120 minutes 110°C 25-35 minutes

It is essential to ensure that tanks and containers of B-277-2 remain sealed or well covered to minimise solvent loss and retain storage stability.

The viscosity of B-277-2 should be monitored regularly with reference to the Viscosity - graphical representations are available upon request.

Elantas Zhuhai X2 or S002 are the recommended solvents for viscosity modification purposes and is available from Elantas Zhuhai. Thinning with other low cost solvents can be performed following suitability analysis by the ELANTAS Zhuhai technical service department.

Packaging

B-277-2 is currently sold in 15kg & 160kg containers for ease of use.

Health & Safety

Refer to Elantas Zhuhai Material Safety Data Sheet (MSDS) for B-277-2.

Shelf life

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



Properties of component as supplied

| Properties | Test Method | Typical Value |
|------------------------------|--------------------------------|----------------------|
| Appearance | Visual Inspection | Clear / Brown Liquid |
| Viscosity @ 25° C | ISO 3219 EEIZ-WI/RD 05.006 | 45-100 cps |
| Solid Content | ISO 3251 EEIZ-WI/RD 05.003 | 34-36% |
| Glass Cure @Room temperature | IEC 60464 EEIZ-WI/RD 05.001 | <15min |
| Flash point | | 22℃ |
| Shelf life | | 12 months |

Electrical properties in cure condition

| Dielectric strength | As made | IEC 60464 EEIZ-WI/RD 05.037 | 4100 V/MIL |
|---------------------|--------------|--------------------------------|------------|
| | 24h in water | | 3000 V/MIL |

Thermal Properties

| Thermal Class | (ASTM D3251) | CLASS B (130°C) |
|---------------|--------------|-----------------|
| | | CLASS F (155°C |
| | | CLASS H (180°C) |

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