

DESCRIPTION

Casting resin for mechanical and numerous electrical applications especially for low or medium voltage.
Example: capacitors, transformers, filters.

PROPERTIES

- Bi-component liquid epoxy resin
- Semi-rigid material
- UL 94 V0 thickness 6 mm
- Good thermal ageing stability

| PHYSICAL PROPERTIES | | | | |
|---|--------------------------|----------|-------------|---------|
| | | RE 22801 | RE 2050 | |
| | | RESIN | HARDENER | MIXED |
| Composition | | | | |
| Mix ratio by weight | | 100 | 11 | |
| Mix ratio by volume at 25°C | | 100 | 18 | |
| Aspect | | liquid | liquid | liquid |
| Colour | RE 22801 BG RESIN | beige | light amber | beige |
| Viscosity at 25°C (mPa.s) | BROOKFIELD LVT | 11,000 | 500 | 4,200 |
| Specific gravity at 25°C (g/cm ³) | ISO 1675 : 1988 | 1.60 | 0.96 | - |
| Specific gravity of cured product at 23°C | ISO 2781 : 1996 | - | - | 1.53 |
| Gel Time at 23°C on 166.5g (min) | Gel Timer Tecam | | | 55 |
| Curing time at 25°C (200gr) | Hours | | | 12 - 24 |
| Final hardness at 25°C (200gr) | Days | | | 7 |

| MECHANICAL PROPERTIES at 23°C (1) | | | |
|-----------------------------------|----------------|----------------|---------|
| Hardness | ISO 868 : 2003 | Shore D1 / D15 | 80 / 66 |
| Tensile strength | ISO 527 : 1993 | MPa | 16 |
| Elongation at break | ISO 527 : 1993 | % | 15 |

(1) : Average values obtained on standard specimens / Hardening 16 hours at 80°C.

PROCESSING

Before use it is necessary to mix the resin until both colour and aspect become homogeneous. Both parts (resin and hardener) have to be mixed at a temperature higher than 18°C according to the mix ratio indicated on the technical data sheet. Before casting check that parts or moulds are free of any trace of moisture.

| THERMAL AND SPECIFIC PROPERTIES (1) | | | |
|---|------------------|----------------------------------|---------------------|
| Working temperature | - | °C | -40 / +120 |
| Maximal operating temperature | - | °C | +130 |
| Thermal conductivity | ISO 2582 : 1978 | W/m.K | 0,7 |
| Glass transition temperature (Tg) | ISO 11359 : 2002 | °C | 20 |
| Coefficient of thermal expansion (CTE) (-40°C to 0°C) (+30°C to +100°C) | ISO 11359 : 1999 | 10 ⁻⁶ K ⁻¹ | 40 |
| | | | 150 |
| Autoextinguibility | UL 94 : 1979 | 6 mm | V0 File E 113398 |
| Water absorption (23°C – 24 Hours) | ISO 62 :1999 | % | 0.6 |
| Directive 2002/95/EC (ROHS) (2) | - | - | conform |

(2) European directive on the restriction of the use of certain hazardous substances for electrical and electronic equipment.

| DIELECTRIC AND INSULATING PROPERTIES AT 23°C (1) | | | |
|---|----------------------|-------|------|
| Dielectric strength (50 Hz- 1 mm) | CEI 60243-1 E2 :1998 | kV/mm | 22 |
| Dielectric constant ε (50 Hz) | CEI 60250 : 1969 | - | 5.5 |
| Dissipation factor tan δ (50 Hz) | CEI6 60250 : 1969 | - | 0.06 |

HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products :

- ensure good ventilation,
- wear gloves, glasses and protective clothes.

For further information, please consult the product safety data sheet.

STORAGE CONDITIONS

Shelf life of both parts is 12 months in a dry place and in their original unopened containers at a temperature between 15 to 25°C.

Any open can must be tightly closed under dry inert gas (dry air, nitrogen, etc.).

GUARANTEE

The information contained in this technical data sheet result from research and tests conducted in our Laboratories under precise conditions. It is the responsibility of the user to determine the suitability of AXSON products, under their own conditions before commencing with the proposed application. AXSON guarantee the conformity of their products with their specifications but cannot guarantee the compatibility of a product with any particular application. AXSON disclaim all responsibility for damage from any incident which results from the use of these products. The responsibility of AXSON is strictly limited to reimbursement or replacement of products which do not comply with the published specifications