

DESCRIPTION

Casting resin for numerous electrical applications especially for low or medium voltage.
Example: electronic cards, fragile electronic components and radio components.

PROPERTIES

- Flexible
- Very low dielectric constant
- Low glass transition temperature
- Excellent behaviour in water immersion and salt spray atmosphere
- Excellent dielectric properties

PHYSICAL PROPERTIES				
Composition		POLYOL RE 11633-(26)	ISOCYANATE RE 1040	MIXED
Mix ratio by weight		100	26	
Mix ratio by volume at 25°C		100	20	
Aspect		liquid	liquid	opaque liquid
Colour		amber	yellow	amber
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	4.600	50	2.500
Humidity rate (%)		< 0.03	-	-
Specific gravity at 25°C	ISO 1675 : 1985	0.92	1.22	-
Specific gravity of cured product at 23°C	ISO 2781 : 1996	-	-	0.97
Gel Time at 25°C on 200 g (min)	Gel Timer TECAM			55

MECHANICAL PROPERTIES at 23°C ⁽¹⁾				
Hardness		ISO 868 : 2003	Shore A1 / A15	63 / 53
Tensile strength		ISO 37 : 2011	MPa	5,8
Elongation at break		ISO 37 : 2011	%	900

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

PROCESSING

Before use Isocyanate: check carefully the absence of crystallisation or dimerisation on each package:

- Solid particle presence.
- Cloudy liquid.

In case of crystallisation or dimerisation, the product must be placed in an oven at 60°C until complete decrystallisation (16 hours maximum). Rehomogenize and return to room temperature. After shaking the product into the package, the product must be as clear as water.

If after treatment, the product is not clear, DO NOT USE THE PRODUCT.

Polyol and Isocyanate 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	-60 / +100
Thermal conductivity	ISO 2582 :1978	W/m.K	0.20
Glass transition temperature (T _g)	ISO 11359 : 1999	°C	-62
Coefficient of thermal expansion (CTE) [-40 to +50]°C	ISO 11359 : 1999	10 ⁻⁶ K ⁻¹	160
Water absorption (23°C – 24 Hours)	ISO 62 :1999	%	0.2
Directive 2002/95/EC (ROHS) ⁽²⁾	-	-	conform

⁽²⁾European directive on the restriction of the use of certain hazardous substances 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	30 ca
Dielectric constant ε (100 Hz)	CEI 60250 : 1969	-	3 ca
Dissipation factor tan δ (100 Hz)	CEI6 60250 : 1969	-	2.10 ⁻² ca
Volume resistivity (1000 V)	CEI 60093 E2 : 1980	Ω.cm	7.10 ¹⁶ ca

HANDLING PRECAUTIONS

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

- Ensure good ventilation.
- Wear gloves and safety glasses.

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

STORAGE CONDITIONS

Shelf life of Isocyanate is 6 months in a dry place and in their original unopened containers at a temperature between **20 to 30°C**. Storage at a temperature below 20°C can provoke crystallisation and dimerisation of the ISO.

Shelf life for Polyol is 9 months in a dry place in its original unopened containers at a temperature between 15 to 30°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