

DESCRIPTION

Casting resin for production of parts and moulds requiring elastomeric properties (seals, mould with undercut).

PROPERTIES

- Low viscosity
- Low moisture sensitivity
- Good abrasion resistance
- Good dimensional stability

PHYSICAL PROPERTIES				
Composition		UR 3435 ISOCYANATE	UR 3442 POLYOL	MIXED
Mix ratio by weight		100	80	
Mix ratio by volume at 25 °C		100	90	
Aspect		liquid	liquid	liquid
Color	UR 3442	colourless	amber	light amber
Viscosity at 25 °C (mPa.s)	BROOKFIELD LVT	6,000	60	800
Specific gravity at 25 °C	ISO 1675 : 1985	1.05	0.92	-
Specific gravity of cured product at 23 °C	ISO 2781 : 1996	-	-	1.02
Pot life at 25 °C on 150 g (min)	Gel Timer TECAM			20

MECHANICAL PROPERTIES AT 23 °C (1)			
Hardness	ISO 868 : 2003	Shore A1/ A15	65 / 63
Tensile strength	ISO 37 : 2004	MPa	2,5
Elongation at break	ISO 37 : 2004	%	850
Tear strength <i>Unnotched angular specimens</i>	ISO 34 : 2004	kN/m	20
BASHORE resilience	ASTM 2632 : 1992	%	48
Abrasion resistance (TABER 1000 revs / H22)	ISO 5470 : 1999	mg / 100U	50

PROCESSING CONDITIONS

Both parts (polyol and isocyanate) have to be mixed at a temperature equal or higher than 18 °C according to the mix ratio indicated on the technical data sheet. Isocyanate may be heated to make it more fluid then pot life will be shorter. Before casting, make sure that parts or moulds are free of any trace of moisture.

THERMAL AND SPECIFIC PROPERTIES (1)

Working temperature	-	-	-40 / +80
Glass transition temperature (tg)	ISO 11357 : 1999	°C	-40
Coefficient of thermal expansion (CTE) [0°C / +40°C]	ISO 11359 : 1999	10 ⁻⁶ K ⁻¹	280
Maximal casting thickness	-	mm	80
Demoulding time at 23°C	-	hours	24
Linear shrinkage (thickness 25mm)	-	mm/m	3

(1): Average values obtained on standard specimens / Hardening conditions 16 hours at 70 °C.

HANDLING PRECAUTIONS

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

- Ensure good ventilation,
- Wear gloves, safety glasses and protective clothes.

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

STORAGE CONDITIONS

Shelf life is 12 months in a dry place and in original unopened containers at a temperature between 20 and 25 °C. Any open can must be tightly closed under dry nitrogen blanket.

Important: If stored at a temperature lower than 15 °C, polyol may crystallize. The part must be placed for 4 to 6 hours in an oven at 50 °C until decrystallization (limpid liquid).

Caution: Excessive heating of the parts (temperature > 60 °C or heating time > 12 hours) may cause a degradation of the product.

PACKAGING

ISOCYANATE UR 3435	POLYOL UR 3442
20 kg	16 kg

GUARANTEE

The information of our technical data sheet are based on our present knowledge and the result of tests conducted 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 refuse any guarantee about 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 guarantee conditions are regulated by our general sale conditions.