

DESCRIPTION

Polyurethane casting elastomer with a low hardness used for production of moulds or flexible parts.

PROPERTIES

- Easy processing
- Excellent tear strength
- Quick demoulding
- Very low hardness

PHYSICAL PROPERTIES				
Composition		PART A ISOCYANATE UR 5801	PART B POLYOL UR 5825	MIXED
Mix ratio by weight		8	100	
Mix ratio by volume at 25°C		8	100	
Aspect		liquid	liquid	liquid
Colour		dark amber	beige	beige
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	350	900	700
Specific gravity at 25°C	ISO 1675 : 1985	1.12	1.15	-
Specific gravity of cured product at 23°C	ISO 2781 : 1996	-	-	1.16
Pot life at 25°C on 108 g (min)	Gel Timer Tecam			24

MECHANICAL PROPERTIES at 23°C (1)			
Hardness	ISO 868 :2003	Shore A1 / A15	30 / 29
Tensile strength	ISO 37 :2004	MPa	2
Elongation at break	ISO 37 :2004	%	830
Tear strength <i>Unnotched angular specimens</i>	ISO 34 :2004	kN/m	13
BASHORE resilience	ASTM 2632 : 1992	%	55
Abrasion resistance (TABER 1000 revs / H22)	ISO 5470: 1999	mg / 100U	100

PROCESSING CONDITIONS

Both parts (polyol and isocyanate) have to be mixed at a temperature equal or higher than 18°C according to the mixing ratio indicated on the technical data sheet. Part A 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 / +70
Glass transition temperature (Tg)	ISO 11357 : 1999	°C	<-80
Coefficient of thermal expansion (CTE) (+0° to +40°C)	ISO 11359 : 1999	10 ⁻⁶ K ⁻¹	250
Linear shrinkage (specimen 250x50x3mm)	-	mm/m	4.30
Maximal casting thickness	-	mm	100
Demoulding time			
-at 23°C	-	hours	24
-at 80°C			2
Complete hardening time			
-at 23°C	-	hours	96
-at 80°C (curing after gel)			4

(1) : Average values obtained on standard specimens / Hardening conditions 16 hr 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 15 and 25° C.
 Any open can must be tightly closed under dry nitrogen blanket.

PACKAGING

ISOCYANATE (Part A) UR 5801 6 x 0.087 kg 1 x 2 kg	POLYOL (Part B) UR 5825 6 x 1 kg 1 x 25 kg
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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.