

UR 3558

POLYURETHANE CASTING ELASTOMER HARDNESS 95 – SHORE A –COLD CURING

DESCRIPTION

Polyurethane resin with very good abrasion and impact resistance properties used for production of parts and tooling.

PROPERTIES

- Good impact behaviour
- Very good tear resistance

- Long pot life
- Good abrasion resistance

• Quick hardening

PHYSICAL PROPERTIES					
Composition		PART A ISOCYANATE	PART B POLYOL	MIXED	
Mix ratio by weight Mix ratio by volume at 25 °C		100 100	42 42		
Aspect		liquid	liquid	liquid	
Colour		colourless	dark amber	amber	
Viscosity at 25℃ (mPa.s)	BROOKFIELD LVT	6,000	125	3,000	
Specific gravity at 25 °C Specific gravity of cured product at 23 °C	ISO 1675 : 1985 ISO 2781 : 1996	1.02	1.01 -	- 1.04	
Pot life at 25 ℃ on 142 g (min)	Gel Timer Tecam			25	

MECHANICAL PROPERTIES at 23 °C (1)				
Hardness	ISO 868 :2003	Shore A1 / A15	95 / 94	
Tensile strength	ISO 37 :2004	MPa	16	
Elongation at break	ISO 37 :2004	%	460	
Tear strength Unnotched angular specimens	ISO 34 :2004	kN/m	57	
BASHORE resilience	ASTM 2632 : 1992	%	53	
Abrasion resistance (TABER 1000 revs / H22)	ISO 5470: 1999	mg / 100U	80	

PROCESSING CONDITIONS

Both parts (polyol and isocyanate) have to be mixed at a temperature equal or higher than 18 $^{\circ}$ 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.

AXSON France BP 40444 95005 Cergy Cedex FRANCE Tél. (++33) 1 34 40 34 60 Fax (+33) 1 34 21 97 87 Email: axson@axson.fr **AXSON GmbH** Dietzenbach Tél. (++49) 60 74 407110

AXSON ITALIA Saronno Tel. (++39) 02 96 70 23 36 AXSON IBERICA Barcelona Tel. (++34) 93 225 16 20

AXSON UK Newmarket Tel. (++44) 1638 660 062 AXSON Central Europe Zlate Moravce Tel. (++421) 376422526

 AXSON MEXICO
 AXSON NA USA

 Mexico DF
 Eaton Rapids

 Tel. (++52) 5552644922
 Tel. (++1) 517 6638191

AXSON SHANGHAI Shanghai Tel. (++86-21) 586829 62 AXSON JAPAN Okazaki city Tel.(++81) 564 262591

AXSON MIDDLE EAST

info.middleeast@axson.com

AXSON INDIA Pune 1 info.india@axson.com

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AXSON KOREA Seoul info.korea@axson.com



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THERMAL AND SPECIFIC PROPERTIES (1)				
Working temperature	-	-	-40 / +80	
Glass transition temperature (Tg)	ISO 11357 : 1999	°C	<-50	
Coefficient of thermal expansion (CTE) (+0°to +40°C)	ISO 11359 : 1999	10 ⁻⁶ K ⁻¹	200	
Linear shrinkage (specimen 250x50x3mm)	-	mm/m	7.90	
Maximal casting thickness	-	mm	50	
Demoulding time -at 23 ℃ -at 80 ℃	-	hours	8 2	
Complete hardening time -at 23 °C -at 80 °C (curing after gel)	-	hours	96 4	

(1) : Average values obtained on standard specimens / Hardening conditions 16 hr at 70 $^{\circ}$ 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.

PACKAGING

ISOCYANATE (Part A)	POLYOL (Part B)
6 x 1 kg	6 x 0.42 kg
1 x 20 kg	1 x 8.4 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.