



BUILDING TRUST



# UR 7845 POLYOL

# UR 7803 ISOCYANATE

## POLYURETHANE CASTING ELASTOMER

Pot life 30-40' – Hardness : 45 to 50 A Shore

### DESCRIPTION

Polyurethane casting elastomer designed to produce moulds or flexible parts, by hand casting or with help of 2K machine. Hardness is slightly adjustable by modification of mix ratio.

### PROPERTIES

- Low shrinkage after hardening
- High elongation at break
- Adjustable hardness from 45 to 50 A Sh
- Low moisture sensitivity
- Good chemical resistance

PHYSICAL PROPERTIES						
Composition		POLYOL UR 7845	ISOCYANATE UR 7803	MIXED 100/60 100/70		
Mix ratio by weight		100	60 or 70			
Aspect		Liquid	Liquid	Liquid		
Colour		Beige	Straw yellow	Beige		
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	2000	2400	2300	2450	
Specific gravity at 25°C (g/cm <sup>3</sup> )	ISO 1675 : 1985	1.22	1.04	-	-	
Specific gravity of cured product at 23°C	ISO 2781 : 1996	-	-	1.15	1.14	
Pot life at 25°C on 160 g (min)	Gel Timer TECAM			30 - 40		

### PROCESSING CONDITIONS

In case of a slightly wet model (gypsum, plaster type), ratio **100/70** (kit 13.3+9.3 Kg) has to be used in order to get a good curing on model surface.

The Polyol part is filled and may show a slight settling; this part must be stirred before any use (homogenous aspect and color without any settling in the container). This operation is easily processed by hand or thanks to a stirring machine.

Both parts (Polyol and Isocyanate) have to be mixed at a higher temperature or equal to 18°C, according to the mix ratio mentioned in this technical data sheet. Before casting, make sure that tools are moisture free.

MECHANICAL PROPERTIES at 23°C (1)				
Hardness	ISO 868 : 2003	Shore A1	45/50	50/55
Tensile strength	ISO 37 : 2011	MPa	3.5	3.5
Elongation at break	ISO 37 : 2011	%	1300	1100
Tear strength <i>Unnotched angular specimens</i>	ISO 34 : 2004	kN/m	16	18



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### THERMAL AND SPECIFIC PROPERTIES (1)

Glass transition temperature (Tg)	ISO 11357 : 1999	°C	< 0
Linear shrinkage (specimen 1000x50x10mm)	-	mm/m	< 1
Maximal casting thickness	-	mm	150
Demoulding time at 23°C	-	Hours	18
Complete hardening time at 23°C	-	Hours	96

(1) Average values obtained on standardized specimens / Hardening: 16h at 40°C

### HANDLING PRECAUTIONS

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

- Ensure good ventilation
- Wear gloves, safety glasses and waterproof clothes

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

### STORAGE CONDITIONS

Shelf life of the Polyol and Isocyanate part is 12 months, in a dry place and in their original unopened containers at a temperature between 15 and 25°C

Any open can must be tightly closed under dry nitrogen.

### PACKAGING

POLYOL UR 7845	ISOCYANATE UR 7803	KIT
13.3 Kg	4.65 Kg 9.3 Kg	13.3 + 9.3 Kg

### 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.