

DESCRIPTION

Two components PU elastomer designed to make ceramic case moulds by hand casting.

PROPERTIES

- *Easy sanding after curing*
- *Homogeneous material*
- *Low moisture sensitivity*
- *Chemical resistance to release agents*

PHYSICAL PROPERTIES				
Composition		ISOCYANATE UR 7801	POLYOL UR 7863	MIXED
Mix ratio by weight		50	100	
Mix ratio by volume at 25°C		80	100	
Aspect		liquid	liquid	liquid
Colour		amber	pink	pink
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	800	7,000	3,000
Specific gravity at 25°C (g/cm ³)	ISO 1675 : 1985	1.02 -	1.59 -	- 1.34
Pot life at 25°C on 150 gr. (min)	Gel Timer TECAM			20

MECHANICAL PROPERTIES at 23°C (1)			
Hardness	ISO 868 : 2003	Shore A1	63
Tensile strength	ISO 37 : 2004	MPa	3,5
Elongation at break	ISO 37 : 2004	%	850
Tear strength <i>Unnotched angular specimens</i>	ISO 34 : 2004	kN/m	16
Abrasion resistance (TABER 1000 revs / H 22)	ISO 5470 : 1999	mg/100U	133

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

PROCESSING CONDITIONS

*Stir carefully polyol before use until both colour and aspect become homogeneous.
Polyol and Isocyanate have to be mixed at a temperature higher than 18°C according to the mixing ratio indicated on the technical data sheet (Working time under high temperature on next page).
Mix by hand with appropriate spatula or use a mixer for higher volumes.
Let it settle for few minutes until bubbles from mixing rise up.
It is not appropriate to degas in a vacuum chamber.
Demoulding at room temperature after 16 hours. Sanding is possible 4 hours after demoulding.
Do not use for production of plaster moulds before 48 hours.*

PROCESSING CONDITIONS

CAUTION: In case of ambient temperature above 28 °C it is advised, before mixing, to split the 15 kg kit in 2 smaller mixtures in order to take advantage of a longer working time.

THERMAL AND SPECIFIC PROPERTIES (1)			
Working temperature	-	-	-40 / +80
Glass transition temperature (Tg)	ISO 11357 : 1999	°C	-85
Coefficient of thermal expansion (CTE) (+0 to +40 °C)	ISO 11359 : 1999	10 ⁻⁶ K ⁻¹	200
Linear shrinkage (specimen 250x50x15mm)	-	mm/m	1
Maximal casting thickness	-	mm	40
Demoulding time at 23 °C	-	hours	16
Complete hardening time at 23 °C	-	days	6

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 for UR 7801 and UR 7863 is 12 months in a dry place and in original unopened containers at a temperature between 20 and 25 °C.

Any open must be tightly closed under dry nitrogen blanket.

PACKAGING

ISOCYANATE UR 7801	POLYOL UR 7863
1 x 5 kg	1 x 10 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.