

## DESCRIPTION

*Casting used for production of tooling for concrete moulding, mould impressions as well as negative contoured forms..*

## PROPERTIES

- Easy processing
- Excellent ductility
- Low viscosity
- Easy degassing
- Excellent tear strength
- Reduced toxicity

PHYSICAL PROPERTIES				
Composition		UR 3435-3445 ISOCYANATE	UR 3445 POLYOL	MIXED
Mix ratio by weight		100	75	
Mix ratio by volume at 25°C		100	64	
Aspect		liquid	liquid	liquid
Colour		colourless	green*	green*
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	6,000	300	2,000
Specific gravity at 25°C	ISO 1675 : 1985	1.05	1.23	-
Specific gravity of cured product at 23°C	ISO 2781 : 1996	-	-	1.13
Pot life at 25°C on 175 g (min)	Gel Timer Tecam			23

\*Some colour variations may occur without changing the final properties.

MECHANICAL PROPERTIES at 23°C (1)			
Hardness	ISO 868 :2003	Shore A1 / A15	72 / 70
Tensile strength	ISO 37 :2004	MPa	9
Elongation at break	ISO 37 :2004	%	1,000
Tear strength <i>Unnotched angular specimens</i>	ISO 34 :2004	kN/m	43
BASHORE resilience	ASTM 2632 : 1992	%	62
Abrasion resistance (TABER 1000 revs / H22)	ISO 5470: 1999	mg / 100U	20

## PROCESSING CONDITIONS

*Before use it is necessary to stir the polyol until both color and aspect become homogeneous. 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. 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	ISO 11357 : 1999	°C	-60
Coefficient of thermal expansion (CTE) (+0 to +40°C)	ISO 11359 : 1999	10 <sup>-6</sup> K <sup>-1</sup>	255
Linear shrinkage (specimen 250x50x3mm)	-	mm/m	4.50
Maximal casting thickness	-	mm	80
Demoulding time -at 23°C -at 80°C	-	hours	24 2
Complete hardening time -at 23°C -at 80°C (curing after gel)	-	hours	144 5

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

**IMPORTANT:** When moulding concrete parts the use of demoulding agents with a hydrocarbons basis can occur an accelerated ageing of the polyurethane moulds. Please consult your demoulding agent supplier in order to choose the product the most adapted to your application.

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

#### PACKAGING

##### UR 3435-3445 ISOCYANATE

1 x 5 kg  
1 x 20 kg

##### UR 3445 POLYOL

1 x 3.75 kg  
1 x 15 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.