



## APPLICATIONS

Used by casting in silicone moulds for production (prototyping and short production runs) of thermoplastic-like parts with a flexural modulus of elasticity close to 1,200 MPa.

## PROPERTIES

- Polypropylene modulus
- Excellent impact and shock resistance
- Low viscosity
- Fast demoulding

PHYSICAL PROPERTIES				
		PART A	PART B	MIXING
Composition		ISOCYANATE	POLYOL	
Mixing ratio by weight at 25°C		100	100	
Aspect		liquid	liquid	liquid
Colour		light yellow	transparent	translucent
Brookfield LVT viscosity at 25°C (mPa.s)	-	100 - 200	800 - 1.200	700 - 900
Specific gravity @ 25°C Specific gravity of the cured product @ 23°C	ISO 1675-75 ISO 2781-88	1.20 - 1.24	1.01 - 1.05	1.13 - 1.17
Pot life @ 25°C on 100g (min.)	-			4 - 6

## PROCESSING (Vacuum casting machine)

- The both parts have to be processed at a temperature above +18°C.
- **Important : Shake vigorously part B before each weighing.**
- Degas before use parts.
- Mix 30 seconds minimum.
- Cast in a mould at 65 - 70°C.
- Allow to cure 60 to 75 minutes at 70°C before demoulding.

## PRECAUTIONS

Normal health and safety precautions should be observed when handling these products :  
. ensure good ventilation  
. wear gloves and safety glasses  
For further information, please consult the product safety data sheet.



## CASTING URETHANE RESIN UNDER VACUUM FOR TECHNICAL PARTS AND PROTOTYPES FLEXURAL MODULUS OF ELASTICITY 1,200 MPa- Tg 90°C

MECHANICAL PROPERTIES @ 23°C (1)			
Flexural modulus of elasticity	ISO 178-93	MPa	1,200
Maximal flexural strength	ISO 178-93	MPa	80
Maximal tensile strength	ISO 527-66	MPa	40
Elongation at break	ISO 527-66	%	25
Charpy impact resistance	ISO 179/1D-94	kJ/m <sup>2</sup>	> 50
Hardness	ISO 868-85	Shore D1	76
- @ 23°C			68
- @ 80°C			

THERMAL & SPECIFIC PROPERTIES (1)			
Glass transition temperature	T.M.A.-Mettler	°C	90
Linear shrinkage	-	mm/m	3
Maximal casting thickness	-	mm	5
Demoulding time @ 70°C	-	min	60 - 75
Complete hardening time @ 70°C	-	h	4

(1) : Average values obtained on standardized specimens, casting in moulds at 65-70°C / Hardening 4 hours at 70°C.

### STORAGE

Shelf life is 6 months in a dry place and in original unopened containers at a temperature between 20 and 30°C. Any open can must be tightly closed under dry nitrogen blanket. Part A (Isocyanat), at low temperature (< 15°C) may crystallize (evidence : non homogeneous liquid part, presence of solid parts). It is advised to heat the product at 70°C until a homogeneous liquid product is obtained.

### PACKAGING

ISOCYANATE (Part A)  
4 x 1.20 kg

POLYOL (Part B)  
4x (2 x 0.60 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.