



APPLICATIONS

Casting for production of transparent prototype parts and mock-ups having mechanical properties close to those of thermoplastics such as polypropylene or PEHD.

PROPERTIES

- Very good impact resistance
- Quick hardening
- Thermoplastic aspect
- Easy processing

PHYSICAL PROPERTIES				
		PART A	PART B	MIXING
Composition		ISOCYANATE	POLYOL	
Mixing ratio by weight		100	50	
Aspect		liquid	liquid	liquid
Colour		white	amber to dark amber	beige to dark beige
Brookfield LVT viscosity at 25°C (mPa.s)	-	2.000 – 4.000	100 - 200	1.200 – 2.000
Density of parts before mixing	ISO 1675-85	1,08	1,08	-
Density of the cured product	ISO 2781-88	-	-	1,08
Pot life at 25°C on 150 g	-			12 -15

PROCESSING CONDITIONS

By crystallization of isocyanate (non homogeneous product) it should be placed in an oven at 60°C until the product becomes homogeneous ; homogenize again. Isocyanate must be at room temperature before using.

- Use in a vacuum casting machine.
- Heat the mould at 70°C.
- Heat both parts at 20°C in case of storage at a lower temperature.
- Weigh part A in the upper cup (do not forget to allow for residual cup waste).
- Weigh part B in the lower cup (mixing cup).
- After degasing for 10 minutes under vacuum pour part A in part B and mix for **2 minutes**.
- Cast in the silicone mould, previously heated at 70°C.
- Put in an oven at 70°C minimum.
- Demould after 1 hour.

HANDLING PRECAUTIONS

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

- Ensure good ventilation
- Wear gloves, safety glasses.

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



MECHANICAL PROPERTIES AT 23°C

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Hardness	ISO 868-85	Shore D1	70
Flexural modulus of elasticity	ISO 178-93	MPa	500
Flexural strength	ISO 178-93	MPa	30
Tensile modulus of elasticity	ISO 527-96	MPa	530
Tensile strength	ISO 527-96	MPa	25
Elongation at break in tension	ISO 527-96	%	100
Charpy impact strength	ISO 179/2D-94	kJ/m ²	-

THERMAL AND SPECIFIC PROPERTIES (1)

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Glass transition temperature (Tg)	TMA METTLER	°C	90 – 100
Heat deflection temperature (HDT)	ISO 75 Ae-93	°C	55
Maximal casting thickness		mm	5
Linear shrinkage (thickness 3 mm / length 250 mm)	-	‰	7
Time before demoulding at 70°C		min.	60

(1) Average values obtained on standardized specimens/Hardening 1 hr at 70°C + 16 hrs at 80°C

STORAGE CONDITIONS

Shelf life of both parts 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

*Isocyanate (Part A)
6 x 1 kg*

*Polyol (Part B)
6 x 0.50 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.