

APPLICATIONS

To be used by vacuum casting in silicon molds for making prototype parts and mock-ups with mechanical properties similar to thermoplastics like polystyrene and filled ABS.

PROPERTIES

- Fast demolding
- Good impact and flexural resistance
- High thermal resistance
- Can be easily colored with CP pigments

PHYSICAL PROPERTIES				
		PART A	PART B	MIXING
Composition		ISOCYANATE	POLYOL	
Mixing ratio by weight		100	50	
Aspect		liquid	liquid	liquid
Color		straw yellow	colorless	white
Brookfield LVT Viscosité @ 25°C (mPa.s)	-	200 - 300	600 – 1,000	1,800 – 2,000 *
Specific gravity @ 25°C	ISO 1675-75	1.20 – 1.24	1.08 – 1.12	-
Specific gravity @ 23°C	ISO 2781-88	-	-	1.18 – 1.22
Pot life @ 25°C on 100 g (min.)	-			3'30" – 4'30"

* Mixing is not instantly miscible.

VACUUM CASTING PROCESSING BY MACHINE

- Heat both parts (isocyanate and polyol) at 23°C in case of storage at lower temperature.
- Weigh both 2 parts.
- Mix for **1 minute minimum** after degasing for 10 minutes under vacuum.
- Cast under vacuum in silicone mold previously heated at 70°C.
- Demold after 25 minutes minimum at 70°C (allow the part to cool down before demolding).

HANDLING 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.



MECHANICAL PROPERTIES (1)

Hardness	ISO 868-85	Shore D1	82
Flexural modulus of elasticity	ISO 178-93	MPa	2,500
Maximal flexural strength	ISO 178-93	MPa	105
Maximal tensile strength	ISO 527-93	MPa	70
Elongation at break	ISO 527-93	%	15
CHARPY impact resistance	ISO 179 1EU-93	kJ/m ²	70

THERMAL & SPECIFIC PROPERTIES ⁽¹⁾

Glass transition temperature (1)	TMA METTLER	°C	105
Heat deflection temperature (1)	ISO 75Ae-93	°C	92
Linear shrinkage (1)	-	mm/m	3
Maximal casting thickness	-	mm	5
Demoulding time at 70°C	-	min	25

(1) Average values obtained on standardized specimens / Curing 12 hr at 80°C + 5 hr at 100°C

STORAGE

Shelf life is 6 months in a dry place and in original unopened containers at a temperature between 15 and 25° C. Any open can must be tightly closed under dry nitrogen blanket.

PACKAGING

*ISOCYANATE (PART A)
6 x 1 kg*

*POLYOL (PART B)
6 x 0.5 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.