

DESCRIPTION

To be used by vacuum casting in pre-heated silicone moulds for making technical or prototype parts and mock-ups with mechanical properties similar to thermoplastic like filled ABS when requiring a fire classification.

PROPERTIES

- Fast demoulding
- Good thermal properties
- Self-extinguishing
- Can be easily coloured with CP pigments

PHYSICAL PROPERTIES				
Composition		ISOCYANATE PX 330	POLYOL PX 330	MIXED
Mix ratio by weight		100	100	
Aspect		liquid	liquid	liquid
Colour		straw yellow	off-white	off-white
Viscosity at 25 °C (mPa.s)	BROOKFIELD LVT	150	4,500	1,000 ⁽¹⁾
Specific gravity at 25 °C (g/cm ³)	ISO 1675 : 1985	1.22	1.33	-
Specific gravity of cured product at 23 °C	ISO 2781 : 1996	-	-	1.35
Pot life at 25 °C on 200 g (min)	Gel Timer TECAM			5 - 7

⁽¹⁾ : Viscosity after one minute mixing (mixing is not miscible straight after).

VACUUM CASTING PROCESSING CONDITIONS

- Heat both part (polyol and isocyanate) at 23 °C in case of storage at lower temperature.
- **IMPORTANT: Shake vigorously the polyol before each weighing.**
- Weigh both parts.
- After 10 minutes degassing under full vacuum
- Cast in a pre-heated polyaddition silicone mould (ESSIL 291) at 70 °C.
- Demould after 45 minutes minimum at 70 °C (let cool down before demoulding).

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.

MECHANICAL PROPERTIES at 23 °C ⁽²⁾

Hardness	ISO 868 : 2003	Shore D1	87
Tensile modulus	ISO 527 : 1993	MPa	4,000
Tensile strength	ISO 527 : 1993	MPa	70
Elongation at break	ISO 37 : 1994	%	3.0
Flexural modulus	ISO 178 : 2001	MPa	3,400
Flexural strength	ISO 178 : 2001	MPa	115
Impact strength (CHARPY) <i>Unnotched specimens</i>	ISO 179/1eU : 1994	kJ/m ²	30

THERMAL AND SPECIFIC PROPERTIES ⁽²⁾

Glass transition temperature (tg)	ISO 11359-2 : 2002	°C	100
Linear shrinkage (specimen 250x50x3mm)			
- after 1 hour at 70 °C		mm/m	3
- after 12 hours at 70 °C	-		3.1
- after 12 hours at 70 °C +12 hours at 80 °C			3.35
Maximum casting thickness		mm	5
Minimal casting thickness		mm	2
Demoulding time at 70 °C		min.	45
Self-extinguishing	FAR 25	mm	2,2 ⁽³⁾
	UL 94- 2012	3 mm	V0 (File E113398)

⁽²⁾ : Average values obtained on standardized specimens / Hardening 12h at 70 °C + 12h at 80 °C

⁽³⁾ : Meets the requirements of the FAR 25.853 for flammability 12 seconds on 2.2 mm.

STORAGE CONDITIONS

Shelf life of both parts is 6 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 PX 330	POLYOL PX 330
6 x 1 kg	6 x 1 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.