

DESCRIPTION

To be used by vacuum casting in silicone moulds for making prototype parts and mock-ups with mechanical properties similar to thermoplastics like polyoxymethylene and polyamide.

PROPERTIES

- High flexural modulus of elasticity
- High reproduction accuracy
- Available in two reactivity (4 and 8 min.)
- Can be easily coloured with CP pigments
- Fast demoulding

PHYSICAL PROPERTIES				
Composition		ISOCYANATE PX 245	POLYOL PX 226 - PX 245 PX 226/L - X245/L	MIXED
Mix ratio by weight		100	40	
Aspect		liquid	liquid	liquid
Colour		grey	bluish colourless	off-white
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	800	700	2,200 (2)
Specific gravity at 25°C (g/cm ³)	ISO 1675 : 1985	1.34	1.10	-
Specific gravity of cured product at 23°C	ISO 2781 : 1996	-	-	1.22
Pot life at 25°C on 500 g (min)	Gel Timer TECAM		PX 226-PX245 PX 226/L-PX 245/L	4 8

(2): Mixing is not instantly miscible.

VACUUM CASTING PROCESSING BY MACHINE

- Use in vacuum casting machine
- Heat the mould at 70 °C (only polyaddition silicone mould)
- Heat isocyanate and polyol at 23 °C in case of storage at lower temperature
- Weigh Isocyanate in upper bowl (do not forget additional waste)
- Weigh Polyol in lower bowl (mixing bowl)
- After degassing for 10 minutes under vacuum, pour Isocyanate into Polyol and mix :
- 1 minute for PX 226-245 Polyol
- 2 minutes for long pot life PX 226L - 245/L Polyol
- Cast under vacuum in silicone mould previously heated at 70 °C
- Cure at 70 °C for 25 to 60 minutes according Polyol reactivity

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 (1)

Flexural modulus of elasticity	ISO 178 :2001	MPa	4,500
Flexural strength	ISO 178 :2001	MPa	150
Tensile strength	ISO 527 :1993	MPa	85
Elongation at break in tension	ISO 527 :1993	%	3
Charpy impact strength	ISO 179/1eU :1994	kJ/m ²	30
Hardness	ISO 868 :2003	Shore D1	- at 23°C
			- at 80°C

THERMAL AND SPECIFIC PROPERTIES

Glass transition temperature (1)	ISO 11359 : 2002	°C	95
Heat deflection temperature (1)	ISO 75Ae :2004	°C	92
Linear shrinkage (1)	-	mm/m	2
Maximal casting thickness	-	mm	5
Demoulding time at 70°C	PX 226-PX 245 PX 226/L-PX 245/L	min.	45
			60

(1) Average values obtained on standard specimens/Hardening 12 hr at 80 °C

STORAGE CONDITIONS

Shelf life is 6 months for Isocyanate and 12 months for Polyol 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.

PACKAGING

PX 245 ISOCYANATE	PX 226- PX 245 POLYOL or PX 226/L-PX 245/L POLYOL
2 x (6 x 0,625 kg)	6 x 0,500 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.