

DESCRIPTION

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

PROPERTIES

- Long pot life
- Good impact and flexural resistance
- Available in 2 reactivities
- High thermal resistance
- Can be easily coloured with CP pigments (maximum 3% in weight)

PHYSICAL PROPERTIES				
Composition		ISOCYANATE PX 226	POLYOL PX 226 – PX 245 PX 226L – PX 245L	MIXED
Mix ratio by weight		100	50	
Aspect		liquid	liquid	liquid
Colour		straw yellow	colourless	white
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	175	700	2,000 (2)
Specific gravity at 25°C (g/cm ³)	ISO 1675 : 1985	1.22	1.10	-
Specific gravity of cured product at 23°C	ISO 2781 : 1996	-	-	1.20
Pot life at 25°C on 100 g (min)	Gel Timer TECAM		PX 226-245 PX 226L- 245/ L	4 7,5

(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 AT 23 °C (1)

Flexural modulus	ISO 178 : 2001	MPa	2,500
Flexural strength	ISO 178 : 2001	MPa	105
Elongation at break	ISO 527 : 1993	%	15
Tensile strength	ISO 527 : 1993	MPa	70
Impact strength (CHARPY) <i>Unnotched specimens</i>	ISO 179/1eU : 1994	kJ/m ²	70
Hardness	ISO 868 : 2003	Shore D1	82

THERMAL AND SPECIFIC PROPERTIES

Glass transition temperature (tg) (1)	ISO 11359 : 2002	°C	105
Deflection temperature (HDT) (1)	ISO 75 : 2004	°C	92
Linear shrinkage (1)	-	mm/m	3
Maximal casting thickness	-	mm	5
Demoulding time at 70 °C	PX 226-245 Polyol PX 226L -PX 245/L Polyol	min	25 60

(1) : Average values obtained on standard specimens / Hardening 12 hr at 80 °C + 5 hr at 100 °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 blanket.

PACKAGING

PX 226 Isocyanate	PX 226-245 Polyol - PX 226L-245/L Polyol
6 x 1,00 kg 1 x 5 kg	6 x 0,50 kg 1 x 2,50 kg

GUARANTEE

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