

APPLICATIONS

Thermoplastic-like parts (prototypes and mock-ups) with a flexural modulus of elasticity close to 1,200 MPa (example : polypropylene, HDPE).

PROPERTIES

- *Low viscosity for easy casting*
- *Excellent impact resistance*
- *Fast demoulding*

PHYSICAL PROPERTIES				
Composition		ISOCYANATE PX 212-225	POLYOL PX 212	MIXING
Mixing ratio by weight at 25 °C		100	100	
Aspect		liquid	liquid	liquid
Colour		light yellow	transparent	translucent
Viscosity at 25 °C (mPa.s)	BROOKFIELD LVT	150	1,000	800
Density of parts before mixing	ISO 1675 :1975	1.22	1.03	-
Density of cured mixing	ISO 2781 :1988	-	-	1.15
Pot life at 25 °C on 100g (min.)	Gel Timer TECAM			4 - 6

PROCESSING

- *Vacuum casting into silicone molds.*
- *Both parts have to be processed at a temperature above +18 °C.*
- ***Important : Shake vigorously Polyol before each weighing.***
- *Degas each part before use.*
- *Mix for 30 seconds minimum.*
- *Cast in a mold pre-heated at 65 - 70 °C.*
- *Cure for 60 to 75 minutes at 70 °C 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 AT 23 °C (1)			
Flexural modulus of elasticity	ISO 178 :2001	MPa	1,200
Flexural strength	ISO 178 :2001	MPa	80
Tensile strength	ISO 527 :1993	MPa	40
Elongation at break in tension	ISO 527 :1993	%	25
Charpy impact resistance	ISO 179/2D :1994	kJ/m ²	> 50
Hardness - at 23 °C - at 80 °C	ISO 868 :1985	Shore D1	76 68

THERMAL AND SPECIFIC PROPERTIES (1)			
Glass transition temperature	T.M.A.-Mettler	°C	90
Heat deflection temperature	ISO 75Ae :1993	°C	78
Linear shrinkage	-	mm/m	3
Maximal casting thickness	-	mm	5
Demolding time at 70 °C	-	min	60 - 75
Complete hardening time at 70 °C	-	hours	4

(1) : Average values obtained on standardized specimens / Hardening 4 hours at 70 °C.

STORAGE CONDITIONS

Shelf life of both parts is 6 months in a dry place and in their original unopened containers at a temperature between 20 and 30 °C. Any open can must be tightly closed under dry nitrogen blanket.

Isocyanate at low temperature (< 15 °C) may crystallize (evidence : non homogeneous liquid part, presence of solid parts). It is advised to heat the product at 70 °C until a homogeneous liquid product is obtained.

PACKAGING

ISOCYANATE
6 x 1.20 kg

POLYOL
2x (6 x 0.60 kg)

GUARANTEE

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