



## PX223 HT

### APPLICATIONS

Used by casting in silicone moulds for making prototype parts and mock-ups whose mechanical properties are close to those of thermoplastics.

### PROPERTIES

- Low viscosity
- Good impact and flexural resistance
- Temperature resistance above 120°C

### PHYSICAL PROPERTIES

		PART A	PART B	MIXING
Composition		ISOCYANATE	POLYOL	
Mixing ratio by weight		100	80	
Aspect		Liquid	Liquid	Liquid
Color		Colourless	Black	Black
Brook field LVT viscosity at 25°C (mPa.s)		800-1400	250-350	750-950
Specific gravity at 25°C	ISO 1675-75	1.15-1.19	1.10-1.14	-
Specific gravity at 23°C	ISO 2781-88	-		1.12-1.16
Pot life at 25°C on 160g (min)				6-7

### PROCESSING BY MACHINE

- The both parts have to be processed at a temperature above +18°C
- **IMPORTANT: Rehomogenize part B before each weighing.**
- Degas each part before use parts
- Mix 45 seconds approx.
- Cast in a pre-heated mould at 40°C before demoulding.
- Allow to cure 45 to 75 minutes at 75°C before demoulding.
- Carry out the following thermal treatment: 1 hr at 100°C and 2 hrs at 110°C or more if possible.



## PRECAUTIONS

Normal health and safety precautions should be observed when handling these products:

- Ensure good ventilation
- Wear gloves and safety glasses

<b>MECHANICAL PROPERTIES AT 23°C AFTER HARDENING <sup>(1)</sup></b>			
Flexural modulus of elasticity	ISO 178-93	Mpa	2.300
Maximal flexural strength	ISO 178-93	Mpa	80
Maximal tensile strength	ISO 527-96	Mpa	60
Elongation at break	ISO 527-96	%	11
CHARPY impact strength	ISO 179-1D-94	KJ/m <sup>2</sup>	>60
Hardness	-at 23°C -at 120°C	ISO 868-85	Shore D/1 80 >65

<b>THERMAL AND SPECIFICS PROPERTIES <sup>(1)</sup></b>			
Glass transition temperature	TMA METTLER	°C	>120
Coefficient of linear thermal expansion (CLTE) [+15, +120]°C	T.M.A – Mettler	10 <sup>-6</sup> K <sup>-1</sup>	115
Linear shrinkage <sup>(1)</sup>	-	mm/m	4
Maximal casting thickness	-	mm	5
Demoulding time @ 70°C	-	min	5-10

(1) Average values obtained on standardized specimens/Hardening 1 hr @ 70°C + 1 hr @ 100°C + 12 hr @ 110°C