

APPLICATIONS

Used by casting in silicone molds for making flexible prototype parts or small series of rubber-like parts.

PROPERTIES

- 3-components polyurethane elastomers for vacuum casting
- Hardness is easily adjusted from Shore A 90 to 20 with part C
- Good mechanical properties
- Low chemical attack towards silicone molds

PHYSICAL PROPERTIES				
	PART A or AK *	PART B	PART C	MIXING
Composition	POLYOL	ISOCYANATE	POLYOL	
Mixing ratio by weight	100	100	0 - 500	
Aspect	liquid	liquid	liquid	
Color	A=Colorless AK= Black	Colorless	Milk white	A/B/C = Off white AK/B/C= Black
Brookfield LVT viscosity at 25°C(mPa.s)	380	420	480	
Density of parts before mixing	1.05	1.20	1.03	
Pot life at 25°C (200 g) (min)				14 - 16
Pot life at 35°C (200 g) (min)				9 - 11

* Part A is crystallization below 15°C. Pre-heat at 40 - 70°C and shake it to transfer homogeneous liquid before use.

* Part A has two different colors to select, A: colorless; AK: black.

PROCESSING

- Decrystallization before using. Warm the product to 25 - 35°C if stocked at low temperature.
- Weigh the components according to the mixing ratio, add part C in part A and pre-mix.
- Degas separately each part for 5-10 minutes.
- Pour part B into part A (containing part C) and mix 2 minutes.
- Cast into the silicone mould pre-heated at 70°C, then leave to cure at 70°C.
- Demould after 60 minutes, or after 90 -120 minutes when hardness is below Shore A 30.

MECHANICAL PROPERTIES at 23°C ⁽¹⁾					
Mixing Ratio	A :B :C	100 :100 :0	100 :100 :50	100 :100 :100	100 :100 :150
Hardness ISO868 :2003	Shore A	86	80	72	65
Elongation ISO37 :2005	%	450	470	500	490
Tensile strength ISO37 :2005	MPa	22	18	13	12
Tear strength ISO34 :2004	N/mm	70	60	45	34

Mixing Ratio	A :B :C	100 :100 :200	100 :100 :300	100 :100 :400	100 :100 :500
Hardness ISO868 :2003	Shore A	58	43	28	16
Elongation ISO37 :2005	%	520	540	580	660
Tensile strength ISO37 :2005	MPa	10	8	7	6
Tear strength ISO34 :2004	N/mm	25	16	14	12

(1) Average values obtained on standard specimens /Hardening 1hr at 70 °C + 24hr at 70 °C + 24 hr at 25 °C.

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.

STORAGE CONDITIONS

Shelf life of POLYOL components is 12 months; ISOCYANATE is 6 months in a dry place and in their original unopened containers at a temperature between 20 to 30°C.

Any open can must be tightly closed under dry inert gas (dry air, nitrogen, etc.).

PACKAGING

PART A, AK

1 x 1.0 KG

PART B

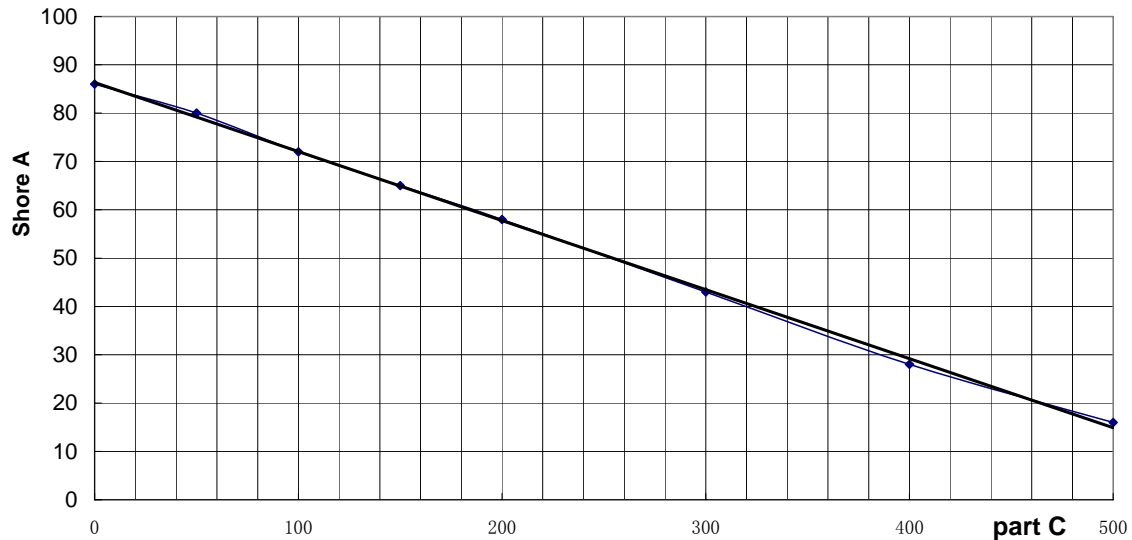
1 x 1.0 KG

PART C

1 x 1.0 KG

HARDNESS CURVE WITH PART C

Hardness of UPX 8400



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.