

DESCRIPTION

Tools for foundries as core boxes, foundry patterns, model plates and any type of parts or tools requiring a good abrasion resistance.

PROPERTIES

- High abrasion resistance
- Low shrinkage
- Odorless
- Low viscosity

PHYSICAL PROPERTIES				
Composition		ISOCYANATE F 40	POLYOL F 40-1	MIXED
Mix ratio by weight		20	100	
Mix ratio by volume at 25°C		29	100	
Aspect		Liquid	Liquid	Liquid
Colour		Dark amber	Blue	Blue
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	60	3000	2000 (a)
Specific gravity at 25°C (g/cm ³)	ISO 1675 : 1985	1.22	1.75	-
Specific gravity of cured product at 23°C	ISO 2781 : 1996	-	-	1.70
Pot life at 25°C on 100 g (min)	Gel Timer TECAM			5'25 – 6'30

(a) At 1 minute 30 seconds

PROCESSING CONDITIONS

Before use Polyol must be stirred until both color and aspect become homogeneous. Polyol and Isocyanate must be mixed together at a temperature above 18°C according to the indicated mix ratio. The maximum advised casting thickness is around 50 mm. Prior to cast, please check that parts or moulds are free of any traces of moisture to avoid bad surface aspect.

MECHANICAL PROPERTIES at 23°C (1)			
Hardness	ISO 868: 2003	Shore D	84
Tensile Modulus	ISO 527-2: 2012	MPa	4800
Tensile strength	ISO 527-2: 2012	MPa	23
Flexural modulus	ISO 178: 2010	MPa	3750
Flexural strength	ISO 178: 2010	MPa	61
Compressive modulus	ISO 604 : 2002	MPa	2800
Compressive strength at yield	ISO 604 : 2002	MPa	57

THERMAL AND SPECIFIC PROPERTIES ⁽¹⁾			
Glass transition temperature (Tg)	ISO 11359-2 : 2002	°C	69
Glass transition temperature (Tg) (2)	ISO 11359-2 : 2002	°C	108
Deflection temperature (2)	ISO 75 : 2004	°C	97
Coefficient of thermal expansion (CTE) (+15°C to +110°C)	ISO 11359-2 : 1999	10 ⁻⁶ K ⁻¹	85
Linear shrinkage (specimen 250x50x3mm)	-	mm/m	1
Demoulding time for 8 mm thickness	-	min	60
Abrasion resistance (TABER)	ISO 5470 : 1999	mg / 100U	126

(1) Average values obtained on standardized specimens / Hardening 7 days at 23°C

(2) Average values obtained on standardized specimens / Hardening 24 hour at 80°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 is 6 months and 12 months for the ISOCYANATE part, in a dry place and in their original unopened containers at a temperature between 15 and 25°C

Any open can must be tightly closed under dry nitrogen.

PACKAGING

ISOCYANATE F 40	POLYOL F 40-1
6 x 0.20 kg	6 x 1.00 kg

GUARANTEE

The information contained in this technical data sheet result from research and tests conducted in our Laboratories 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 guarantee the conformity of their products with their specifications but cannot guarantee 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 responsibility of AXSON is strictly limited to reimbursement or replacement of products which do not comply with the published specifications.