

DESCRIPTION

Polyurethane casting elastomer designed to produce semi-flexible parts or moulds.

Hand casting, but also exists with short pot life for 2K machines applications. Please refer to UR 5895F series TDS.

PROPERTIES

- Easy processing
- Good tear strength
- High impact resistance
- Quick setting at room temperature
- Available in 8 colours

PHYSICAL PROPERTIES				
Composition		UR 5805 ISOCYANATE	UR 5895 POLYOL	MIXED
Mix ratio by weight		55	100	
Mix ratio by volume at 25 °C		54	100	
Aspect		liquid	liquid	Liquid
Colour		straw yellow	coloured	coloured
Viscosity at 25 °C (mPa.s)	BROOKFIELD LVT	450	1,500	1,000
Specific gravity at 25 °C (g/cm ³)	ISO 1675 : 1985	1.21	1.19	-
Specific gravity of cured product at 23 °C	ISO 2781 : 1996	-	-	1.25
Pot life at 25 °C on 155 g (min)	Gel Timer TECAM			various

REFERENCES	COLOUR	POT LIFE at 25 °C on 155 g (min)
UR 5805 / UR 5895 BE	Blue	6
UR 5805 / UR 5895 SBE	Blue	10
UR 5805 / UR 5895 BEL	Light blue	6
UR 5805 / UR 5895 DBE	Dark blue	6
UR 5805 / UR 5895 OE	Orange	3.5
UR 5805 / UR 5895 OEL	Light orange	3.5
UR 5805 / UR 5895 GN	Green	6
UR 5805 / UR 5895 WE	White	6
UR 5805 / UR 5895 YW	Yellow	6

MECHANICAL PROPERTIES at 23 °C (1)

Hardness	ISO 868 : 1985	Shore A1	94
Tensile strength	ISO 37 : 1977	MPa	16
Elongation at break	ISO 37 : 1977	%	400
Tear strength <i>Unnotched angular specimens</i>	ISO 34 : 1994	kN/m	64
BASHORE resilience	ASTM 2632 : 1992	%	25

THERMAL AND SPECIFIC PROPERTIES (1)

Working temperature	-	°C	-20 / + 70
Glass transition temperature (tg)	T.M.A - Mettler	°C	< 0
Demoulding time			
- at 23 °C	-	h	12
- at 80 °C (curing after gel)			1
Maximal casting thickness	-	mm	50

(1) Average values obtained on standardized specimens / Hardening 12h at 80 °C

PROCESSING CONDITIONS

Before use, the polyol must be stirred until both color and aspect become homogeneous without any remaining particles at the bottom of the pail. **By crystallization of isocyanate or polyol (non homogeneous aspect for the polyol; unclear liquid for the isocyanate) it should be placed in an oven at 60 °C until the product becomes homogeneous; homogenize again before use.** Both parts (polyol and isocyanate) must be mixed at a temperature above 18 °C according to the indicated mix ratio. Before casting checks that the parts or the molds are free of any trace of moisture.

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 isocyanate is 09 months and polyol is 12 months in a dry place and in their original unopened containers at a temperature between 15 and 25 °C
Any open must be tightly closed under dry nitrogen.

PACKAGING

ISOCYANATE UR 5805	POLYOL UR 5895
11 kg / 225 kg / 1025 kg	20 kg / 205 kg / 1025 kg according to colours Please contact us

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.