

APPLICATIONS

Production of parts having mechanical properties close to those of thermoplastics such as filled polypropylene or ABS in prototype or small and medium scale series when requiring a UL V0 filing.

Electronics, furniture, household appliances: boxing, casings, etc.

PROPERTIES

- Quick demoulding
- Certified UL 94 V0 in 3 mm*
- Exist in 2 colors
- Good temperature resistance
- Good ability for bonding and painting

PHYSICAL PROPERTIES				
Composition	METHOD	RIM 620 ISOCYANATE	RIM 620 BK / BG POLYOL	MIXING
Mix ratio by weight		68	100	
Mix ratio by volume at 25°C		77	100	
Aspect		liquid	thick liquid	liquid
Colour		dark amber	black / beige	black / beige
Viscosity at 25°C (mPa.s)	Brookfield LVT	300	12,000	3,500
Specific gravity at 25°C	ISO 1675-75	1.22	1.38	
Specific gravity at 23°C of the cured product	ISO 2781-88	-	-	1.35
Pot life at 25°C on 168 g (s)	-	-	-	55 - 65

PROCESSING CONDITIONS

Used with a 2-component low pressure injection machine fitted out preferably with an agitator in the polyol tank. Before each use of polyol stir until a homogeneous colour is obtained. The two parts (polyol and isocyanate) must be mixed at a temperature higher than 18°C according to the mix ratio indicated on the technical data sheet.

Before casting check that the 851 DEMOULDING AGENT is applied to moulds free of any trace of moisture (demoulding agent specified for a low pressure injection to 80°C). For further information please see the AXSON's technical data sheet about RELEASE AGENTS.

The optimum properties of the material are obtained after a 2 hours post-curing at 80°C.

Caution: according the part geometry, it may be necessary to use a conformer when post-curing. A quicker demoulding is made possible by the use of a tool heated to a temperature between 40 to 70°C.

NOTICE: the colour of the RIM 620 BG Polyol could be darker when aged. It does not change at all the final properties of cured product.

REMARKS

The ADEKIT A 310-1 adhesive of the Axson's range is particularly recommended for bonding this resin to itself or with different materials such as thermoplastics, steel, etc. To repair surfaces to be painted or bonded degrease parts with an alcohol or acetone or some liquid soap. A polyurethane paint is advised. In case of drying paint in an oven, make sure the part was well cured before processing.

MECHANICAL PROPERTIES at 23°C (1)			
Flexural modulus of elasticity	ISO 178-2010	MPa	2,500
Flexural strength	ISO 178-1993	MPa	77
Elongation at break	ISO 527-66	%	4
Charpy impact resistance (Unnotched specimens)	ISO 179/1eU-1993	kJ/m ²	18
Hardness	ISO 868-85	Shore D1	85

THERMAL AND SPECIFIC PROPERTIES (1)			
Temperature of use	-	°C	-20 / +90
Glass transition temperature	T.M.A.-Mettler	°C	100
Coefficient of thermal expansion (C _L TE) [5, 80]°C	T.M.A.-Mettler	10 ⁻⁶ K ⁻¹	78
Demoulding time @ 23°C	-	min.	15
Advised maximum casting thickness	-	mm	15
Self-extinguishing	UL 94	3 mm thickness	V0*

(1) : Average values obtained on standardized specimens, casting in moulds @ 23°C / Hardening 2 hours @ 80°C.
* Certified by Underwriters Laboratories (UL)

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.

STORAGE CONDITIONS

Shelf life is 6 months in a dry place and in original unopened containers at a temperature between 15 and 25°C. Any open must be tightly closed under dry gas blanket (dry air, nitrogen).

PACKAGING

RIM 620 ISOCYANATE	RIM 620 BK - RIM 620 BG POLYOL
17 kg	25 kg

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.