

DESCRIPTION

Rim purpose-made for the rotomoulding of production parts requiring mechanical properties close to those of thermoplastics such as polystyrene or ABS, in prototype and small and medium scale series.

PROPERTIES

- High reactivity
- Good resistance at high temperature
- Quick demoulding
- Very easy processing
- Good ability for bonding and painting
- High shock resistance

PHYSICAL PROPERTIES				
Composition		POLYOL RIM 832 GY	ISOCYANATE RIM 974	MIXING
Mix ratio by weight		100	60	
Mix ratio by volume at 25 °C		100	58	
Aspect		liquid	liquid	liquid
Colour		light grey	dark amber	grey
Brookfield LVT viscosity at 25 °C (mPa.s)	-	1,100 – 1,800	150-250	-
Density at 25 °C	ISO 1675-85	1.14-1.18	1.20-1.24	-
Density of the cured product at 23 °C	ISO 2781-88	-	-	1.20-1.24
Pot life at 25 °C on 160g (s)	-			120-145

PROCESSING CONDITIONS

Used with a 2-component low pressure injection machine preferably fitted with an agitator in the polyol tank. Before use, check that the Polyol has not crystallised and plasticate until a homogeneous colour is obtained. The two parts (polyol and isocyanate) must be mixed at 18 °C minimum according to the mix ratio indicated on the technical data sheet.

Before casting check 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 16 hours post-curing at 80 °C

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

REMARKS

The ADEKIT A 310 NF 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 liquid soap. A polyurethane paint is advised.

MECHANICAL PROPERTIES AT 23 °C (1)			
Flexural modulus of elasticity (E _f)	ISO 178-93	MPa	1,200
Tensile strength	ISO 178-93	MPa	45
CHARPY shock resistance (a _{cU}) (Unnotched specimens)	ISO 179/1eU-93	kJ/m ²	30
Hardness	ISO 868-85	Shore D1	80

THERMAL AND SPECIFIC PROPERTIES (1)			
Operating temperature	-	°C	-20 / +90
Glass temperature transition	T.M.A.-Mettler	°C	110
Maximum casting thickness	-	mm	10
Linear shrinkage on parts at 23 °C			
- thickness from 2 to 3 mm	-	mm/m	4-6
-thickness from 4 to 5 mm	-		6-8

(1) : Average values obtained on standardized specimens, casting in moulds at 23 °C / Hardening 12 hours at 80 °C.

STORAGE

Shelf life is 12 months in a dry place and in original unopened containers at a temperature between 15 and 25 °C. Any open can must be tightly closed under dry nitrogen blanket.

The polyol, at low temperature may crystallize (evidence : non homogeneous liquid part). It is advised to heat the product at 40 °C until a homogeneous liquid product is obtained.

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.

PACKAGING

RIM 832 GY/ POLYOL
1 x 20 kg

RIM 974/ ISOCYANATE
1 x 12 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.