

## DESCRIPTION

Parts having mechanical properties similar to thermoplastics such as polypropylene or polyethylene, in prototype and small and medium scale series.

Car industry: interior trim, dash board elements, bumpers, spoilers, etc.  
Electronics, furniture, household appliances : boxing, casings, etc

## PROPERTIES

- High impact resistance
- Good temperature resistance
- Very easy processing
- Good ability for bonding and painting

PHYSICAL PROPERTIES				
Composition		RIM 826 POLYOL	RIM 902 ISOCYANATE	MIXING
Mixing ratio by weight		100	100	
Mixing ratio by volume @ 25°C		100	88	
Aspect		liquid	liquid	liquid
Coulour		black	Straw yellow	black
Brookfield LVT viscosity @ 25°C (mPa.s)	-	2,000	600	800 - 1.200
Specific gravity @ 25°C	ISO 1675 : 1985	1.05	1.20	-
Specific gravity of cured product @ 25°C	ISO 2781 : 1996	-	-	1.12
Pot life @ 25°C on 100g (min)	-			1'20 – 1'40

## PROCESSING CONDITIONS

RIM 826 must be used with a 2-component low pressure injection machine fitted out preferably with an agitator in the polyol tank (part A). Since polyol may crystallise (see storage §) please check before each use and mix if necessary until its colour becomes homogeneous. Both parts (polyol and isocyanate) must be mixed at a temperature higher than 18°C according to the mix ratio indicated on this technical data sheet.

Casting must be conducted in moulds free of any trace of moisture and previously coated with 851 demoulding agent (specified up to 100°C injection). For further information please consult AXSON's technical data sheet about ANCILLARY PRODUCTS.

Optimum properties of the material are obtained after a 12-h post-curing at 80°C.

**Caution** : according to the geometry of the part, it may be necessary to use a frame when post-curing. It is possible to demould faster by using a tool heated at a temperature close to 40°C.

## REMARKS

ADEKIT A 300 adhesive of Axson's range is particularly recommended for bonding this resin to itself or with different materials such as thermoplastics, steel, etc. To prepare surfaces to be painted or bonded degrease with alcohol, acetone or liquid soap. A polyurethane paint is advised.

MECHANICAL PROPERTIES (1)			
Tensile strength	ISO 527 : 1993	MPa	28
Elongation at break	ISO 527 : 1993	%	50
Elasticity modulus	ISO 178 : 2001	MPa	800
Flexural strength	ISO 178 : 2001	MPa	35
Impact strength CHARPY (Un notched specimens)	ISO 179/1eU :1994	kJ/m <sup>2</sup>	100
Hardness	ISO 868 : 2003	Shore D1	73

THERMAL AND SPECIFIC PROPERTIES (1)			
Temperature of use	-	°C	-40 / +90
Glass transition temperature (T <sub>g</sub> )	ISO 11359 : 2002	°C	95
Coefficient of thermal expansion (CTE) [0 to +90°C)	IOS 11359 : 1999	10 <sup>-6</sup> K <sup>-1</sup>	140
Linear shrinkage on parts @ 23°C :			
- thickness 2 à 3 mm	-	mm/m	4 - 6
- thickness 4 à 5 mm			6 - 8
- thickness 5 à 10 mm			8 - 10
Maximum casting thickness	-	mm	10
Demoulding time @ 23°C	-	min.	25

(1): Average values obtained on standard specimens / Casting in moulds @ 23 °C and hardening 12 hours @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 both parts is 12 months 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.

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.

## PAKAGING

**RIM 826 POLYOL**  
1 x 20 kg

**RIM 902 ISOCYANATE**  
1 x 20 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.