

## APPLICATIONS

RIM 836/974 casting PU is dedicated to produce semi rigid parts. With 10 minutes pot life allowing hand casting or usable with 2 K dispensing machine equipment, the RIM 836/974 is a cold curing PU matching properties of a polypropylene. Could be also used in rotational moulding to achieve large parts.

## PROPERTIES

- Very easy processing
- Good impact resistance
- Quick demoulding

| PHYSICAL PROPERTIES                  |                 |               |                   |        |
|--------------------------------------|-----------------|---------------|-------------------|--------|
|                                      |                 | RIM 836       | RIM 974           | MIXING |
| Composition                          |                 | <b>POLYOL</b> | <b>ISOCYANATE</b> |        |
| Mix ratio by weight                  |                 | 100           | 60                |        |
| Mix ratio by volume at 25°C          |                 | 100           | 60                |        |
| Aspect                               |                 | liquid        | liquid            | liquid |
| Colour                               |                 | BEIGE         | AMBER             | BEIGE  |
| Viscosity at 25°C (mPa.s)            | BROOKFIELD LVT  | 2.000         | 200               | 1.000  |
| Density at 25°C                      | ISO 1675-85     | 1.24          | 1.22              | -      |
| Density of the cured product at 23°C | ISO 2781-96     | -             | -                 | 1.25   |
| Pot life at 25°C on 160g (min)       | Gel Timer TECAM |               |                   | 9-11   |

| MECHANICAL PROPERTIES AT 23°C (1)                                   |                  |                   |     |
|---|------------------|-------------------|-----|
| Flexural modulus of elasticity (E <sub>f</sub> )                    | ISO 178-2001     | MPa               | 850 |
| Tensile strength  | ISO 527-96       | MPa               | 23  |
| CHARPY shock resistance (a <sub>cU</sub> )<br>(Unnotched specimens) | ISO 179/1eU-2000 | kJ/m <sup>2</sup> | >50 |
| Hardness  | ISO 868-2003     | Shore D1          | 75  |

## PROCESSING CONDITIONS

May be used manually or with a 2-component low pressure injection machine preferably fitted  
Before use, check that the Polyol has not crystallised at low temperature (see storage conditions)

The two parts (polyol and isocyanate) must be mixed at 18°C minimum according to the mix ratio indicated on the technical data sheet. POLYOL may be heated in order to fluidify the mixing; by hence pot-life will be shorter.  
Before casting check that the parts or the moulds are free of any trace of moisture.

| THERMAL AND SPECIFIC PROPERTIES (1) |                |    |           |
|-------------------------------------|----------------|----|-----------|
| Operating temperature               | -              | °C | -40 / +80 |
| Glass temperature transition        | T.M.A.-METTLER | °C | 95        |
| Maximum casting thickness           | -              | mm | 10        |
| Demoulding time at 23 °C            | -              | h  | 2-4       |

(1) : Average values obtained on standardized specimens, casting in moulds at 23°C / Hardening 16 hours at 70°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.

**IMPORTANT:** the polyol, at temperature below 15 °C may crystallized (evidence: non homogeneous liquid part). It is advised to heat the product at 50°C max during 4 at 6 hours..

**CAREFUL:** excessive heating of the parts (temperature > 60°C or heating time > 12 hours) may cause a degradation of the product.

## 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 836 POLYOL | RIM 974/ ISOCYANATE |
|----------------|---------------------|
| 2 x 208 kg     | 1 x 250 kg          |
| 1 x 20 kg      | 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.