

Lieu Dit Ferme de L'Evêché – CS20308 60723 Pont-Sainte-Maxence CEDEX France Tél. :03 44 31 72 00 - Tél. international : + 33 3 44 31 72 00 Fax : 01 57 67 44 58 - Fax international : + 33 1 57 67 44 58 E-mail : contact@synthene.com http://www.synthene.com



### **REFERENCES**

Polyol : PR 2900 P - SH 110 000 Isocyanate : PR 2900 I - SH 000 290

### DEFINITION

Polyurethane resin for vacuum casting. High flexural modulus Suitable with European directive: 2011/65/EC (RoHS)

# PHYSICAL DATA OF THE COMPONENTS

|   | PR 2900 P<br>SH 110 000         | PR 2900 I<br>SH 000 290 | PR 2900             |
|---|---------------------------------|-------------------------|---------------------|
| Aspect – Color  | Liquid transparent<br>Colorless | Liquid light yellow     | Liquid light yellow |
| BROOKFIELD Viscosity LVT in<br>mPa.s<br>According to MO-051 | 700                             | 250                     | 400                 |
| Density at 25°C<br>According to MO-032                      | 1.08                            | 1.21                    | 1.17                |

#### PROCESS DATA

|   | PR 2900 P<br>SH 110 000 | PR 2900 I<br>SH 000 290 | PR 2900 |
|---|-------------------------|-------------------------|---------|
| Mixing ratio in weight                                | 50                      | 100                     |         |
| Mixing time at 25°C (sec.)                            |                         |                         | 2'20    |
| Pot-life on 100g at 25°C (min.)<br>Test method MO-062 |                         |                         | 6'30    |
| Demoulding time at 70°C (min.)<br>Test method MO-116  |                         |                         | 45'     |

## **AVERAGE POLYMER PROPERTIES**

|                                    | Test Method       |                      |
|------------------------------------|-------------------|----------------------|
| Hardness Shore D1 (1)              | ISO 868 - 2003    | 86                   |
| Heat Deflection Temperature (1)    | ISO 75 Ae:2001    | 92°C                 |
| Flexural modulus of elasticity (1) | ISO 178 : 2001    | 2900 MPa             |
| Maximal flexural strength (1)      | ISO 178 : 2001    | 119 MPa              |
| Tensile modulus of elasticity (1)  | ISO 527 : 1993    | 2900 MPa             |
| Elongation at break (1)            | ISO 527 : 1993    | 7 %                  |
| Tensile strength at break (1)      | ISO 527 : 1993    | 78 MPa               |
| Charpy impact strength (1)         | ISO 179/1D : 1994 | 70 kJ.m <sup>2</sup> |

(1)Average values measured on specimens after post curing 2 h at  $70^{\circ}$ C + 5 h at  $100^{\circ}$ C + 24 h at room temperature

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It's the responsibility of the user to check the convenience of the product in his own conditions defined and tried by himself. The **Synthene** Company disclaims all responsibility for any consequence occurred by the use of this product.



# Safety for using :

Better wear safety clothes and accessories (gloves and glasses). For more information, read the medical and safety data sheet of the product.

### Process with vacuum casting machine :

Pre-heat polyaddition silicone moulds at 70°C. Weigh isocyanate part in the upper cup (don't forget the residual product). Weigh polyol part in the mixing cup. After 10 min of vacuum, pour the isocyanate part in mixing cup and mix until total clearness of the mixing. (at least 1 min 30 for a process at 25°C). Pour in the mould. Put the mould in an oven at 70°C for approximately 2 hours according to the thickness of the part.

## Packaging :

Please consult us.

**STORAGE**: 12 months in original unopened containers and stored between 15 and 25 °C.

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