

PRA 730

Mercury free and halogen free product, RoHS suitable.

References

Polyol : PRA 730 P - SH 130 000
Isocyanate : PRA 730 I - SH 000 402

Definition

Self-extinguishing, according to FAR25, polyurethane resin for vacuum casting.

Halogen free, and mercury free product suitable with European directive: 2011/65/EC, 2002/96/EC, 2000/53/EC and 2000/11/EC.

High thermal resistance (HdT : 130°C) and good chemical resistance.

Low aggressivity on silicon moulds.

Average physical properties of the components

	PRA 730 Polyol SH 130 000	PRA 730 I SH 000 402	PR A 730 SH 130 402
Aspect – Color	Dark grey liquid	Transparent liquid colorless	grey liquid
Viscosity Brookfield LVT (mPa.s) According to MO-051	4000	1200	2500
Density at 25°C According to MO-032	1.25	1.12	1.20

Process data

Please stir well the polyol part before use

	PRA 730 Polyol SH 130 000	PRA 730 I SH 000 402	Mixing SH 130 402
Mixing ratio by weight	100	72	
Mixing ratio by volume	100	89	
Pot life 200g at 25°C (min.) According to MO-062			8
Demoulding time at 70°C (min.) According to MO-116			Approx. 45

Average mechanical and thermal properties of the solid piece

		Test methode	
Hardness Shore D1 (1)		ISO 868-2003	81
Heat deflection temperature (HdT) (1)	(°C)	ISO 75 Ae:2001	130
Flexural modulus (1)	(MPa)	ISO 178 : 2001	2100
Maximal flexural strength (1)	(MPa)	ISO 178 : 2001	63
Elongation at break (1)	(%)	ISO 527 : 1993	4
Tensile modulus of elasticity (1)	(MPa)	ISO 527 : 1993	2300
Tensile strength (1)	(MPa)	ISO 527 : 1993	41
Charpy impact (without slight cut) (1)	(kJ.m ⁻²)	ISO 179/1D : 1994	16
Linear shrinkage (3 mm thickness) (1)	(mm/m)	-	2
Self extinguishibility (1)	(mm)	FAR 25	2

This document can not be, in any case, used as specification data sheet. The values mentioned on this document are based on tests and researches carried on in our laboratories in precise conditions.

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.



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>

(1) All results are obtained after curing 1 h at 70°C + 1 h at 100°C + 2 at 120°C + 24 h at RT

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 (stir well the polyol part before).
After 10 min of vacuum, pour the isocyanate part in mixing cup and mix to reach total and perfect homogeneity (approx 50 to 60 sec.)
Pour in the silicone mould.
Put the mould in an oven at 70°C.
Demoulding is possible after 50 min according to the thickness, then post curing is necessary to reach maximal characteristics.

Packaging :

Parcel of 2 kits of (5,0 + 3,6) kg

Storage : 12 months in original and unopened cans stored between 15 and 25 °C.

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