Trias Chem s.r.l.

Formulazioni epossidiche e poliuretaniche - Prodotti chimici per l'industria

Technical data sheet

Resin	Hardeners		
RP 026UV	IPE 715	IPE 743	IPE 743 L
100	**Mixing ratio by weight**	**25**	**45**	**45**

Applications

Models and transparent objects.

Processing

Mass casting on little, medium and high thicknesses depending on the hardener used. Curing at room temperature.

Product information

Epoxy system unfilled, very high transparency. Excellent resistance to yellowing thanks to its inner UV filter.

Product characteristics	**RP 026UV**	**IPE 715**	**IPE 743**	**IPE 743 L**
Colour	light violet	colourless	colourless	colourless
Viscosity at 25°C (mPas)	600 – 700	35 – 65	150 – 250	150 – 250
Density at 25°C (g/ml)	1,09 – 1,12	0,94 – 0,97	0,99 – 1,01	0,99 – 1,01
Mixing ratio by volume (ml)	100	30	50	50

System typical characteristics

Pot life (200 ml, 50 mm, 25°C)	min	30 – 40 (100 ml)	100 – 120	125 – 135
Exothermal peak (200 ml, 50 mm, 25°C)	°C	170 – 180 (100 ml)	105 - 115	50 – 60
Gel time (15 ml, 5 mm, 25°C)	h	4 – 5	15 – 18	18 – 20
Demoulding time (15 ml, 5 mm, 25°C)	h	8 – 10	18 – 22	25 – 30
Post-curing at 40°C	h	10 – 15	10 – 15	10 – 15
Maximum recommended thickness	mm	3 – 5	30 – 40	50 – 60

RT = room temperature (23±2°C)
Conversion units: 1 mPas = 1 cPs 1MN/m² = 10 kg/cm² = 1 MPa

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RP 026UV – IPE 715 / IPE 743 / IPE 743 L

TYPICAL CURED SYSTEM PROPERTIES

(standard curing: 24h at room temperature + 15h 60°C

Colour		light violet	light violet	light violet
Hardness Shore	D/15	80 – 85	72 – 77	70 – 75
Glass transition	°C	75 – 80	50 – 54	48 – 52

Instructions for a proper use

Verify and, if necessary, homogenize components before use.
Mix the two components (resin and hardener) in the proper mixing ratio avoiding air trapping until an homogeneous mixture is obtained, then apply.
Prepare surface of mould with 2 or 3 applications of wax release agent (consult release agent data sheet).

Post-curing

Post-curing is always advisable to stabilize the cured handwork to reach the best mechanical properties. Post-curing becomes necessary when the handwork is used at elevated temperatures.
Post-cure the handwork increasing temperature avoiding thermal gradients over 10°C/hour. The thermal gradient and post curing time refer to standard specimens. Users should find the best conditions depending on the component size and shape. For big size components decrease the thermal gradient and increase the post-curing time; in the case of thin layer applications and composites post cure on the jig.

Storage and handling precautions

Epoxy resins and hardeners can be stored over two years in the original sealed package in a cool and dry place. Hardeners are moisture sensitive.
Refer to the product health and safety data sheet.

first emission date: **November 8th 2010**