

Epoxy Casting Resins

RAIGIPOXE (Resin)	E405	T131	E355K	T502	E350	A310A	A309	A331-1
RAIGIDUR (Hardener)	D445	D15	D955K	D482	D950	310B		
Mixing ratio (parts by weight)	100 ± 82	100 ± 100	100 ± 82	100 ± 22	100 ± 82	100 ± 1.07	100+50	100+40
Epoxy viscosity (20°C)	16 000 ± 2 500	9 500 ± 1 500	14 000 ± 2 500	6 000 ± 1 000	1 300 ± 300	110 000 ± 20 000	110 000 ± 20 000	3500
Hardener viscosity (20°C)	4 000 ± 1 000	15 000 ± 5 000	10 000 ± 2 500	200 ± 100	1 300 ± 300	----	----	----
Colour	Natural Colour	Natural Colour	Green	Black	Dark green	White	Black	Black
Gel time (25°C)	60' ± 10'	< 480	60	75' ± 15'	25' ± 7' (pot life)	11' ± 2' (130°C)	11' ± 2' (130°C)	10 ± 2 (80°C)
Density Resin (25°C)	1.60 ± 0.03	1.17 ± 0.05	1.60 ± 0.03	1.60 ± 0.05	1.12 ± 0.03	1.40 ± 0.05	1.40 ± 0.04	1.29 ± 0.05
Density Hardener (25°C)	1.45 ± 0.03	0.96 ± 0.05	1.50 ± 0.03	1.05 ± 0.05	1.04 ± 0.03	1.40 ± 0.05	----	----
Shore-Hardness A / D (25°C)	70 ± 5 ShD	?	80 ± 5 ShD	80 ± 3 ShD	85 ± 5 ShD	90 ± 5 ShD	90 ± 5 ShD	85 ± 5 ShD
Operating temperature (°C)	- 20°C; +120°C	- 20°C; +120°C	- 20°C; +120°C	- 40°C; + 120°C	- 20°C; +120°C	- 40°C; + 160°C	- 40°C; + 160°C	- 40°C; + 140°C

Thermal conductivity W/(m.K)	0.56	----	0.64	0.45	0.21	0.4	0.4	0.3
Water absorption (mg/cm²) 28 days - 70	6.7	----	10	----	7.2	----	----	----
Dielectric strength (KV/mm)	6kV/6h/5mm	----	6kV/6h/5mm	> 30	20KV / 1mm / 6h	----	----	----
Dielectric constant (at 55 Hz)	4.0	----	4.1	4.9	3.2	4.1	4.1	3.7
Loss factor tan δ (55 Hz)	0,007	----	0.02	0.02	0.02	1.9 x 10 ⁻²	1.9 x 10 ⁻²	10 ⁻²
Application	Junction cables	Bonding / Laminating	Junction cables	Encapsulation	Junction cables	Hot-melt glueing	Hot-melt glueing	Hot-melt glueing