

# Maximizing Thermal Endurance!

Staying cool with RAMPF Electro Casting Resins.



Electro casting resins made by RAMPF provide sensitive electrical/electronic components with reliable and efficient protection against environmental influences such as heat, cold and moisture.

Heat management is very important here – if components get too hot, their performance decreases or they suffer damage. By surrounding the heat source in components and dissipating the generated heat, electro casting resins ensure the continuous high performance of electrical/electronic systems.

The long-term resistance of casting resin systems to high temperatures is also vital given that increasing temperatures accelerate many material aging processes such as embrittlement, discoloration, and degradation.

Characteristics	Unit	B-Class – 130 °C			F-Class – 155 °C			H-Class – 180 °C	
		RAKU® PUR 21-2075-1	RAKU® PUR 21-2350	RAKU® PUR 21-2360-1	RAKU® PUR 21-2452	RAKU® PUR 21-2456	RAKU® POX 22-1010	RAKU® POX 22-1620	RAKU® POX 22-1650
Color		black	beige, black	black	black	black	beige, black	brown	brown
Viscosity A-Component	mPa·s	9,000 at 20 °C	4,000 at 20 °C	9,000 at 20 °C	9,000 at 20 °C	78,000 at 20 °C	12,000 at 25 °C	76,000 at 25 °C	147,000 at 25 °C
Mixing ratio A : B	Gew. TI	100 : 10	100 : 16	100 : 15	100 : 14	100 : 8	100 : 13	100 : 100	100 : 111
Mix viscosity	mPa·s	4,400 at 20 °C	2,500 at 20 °C	2,800 at 20 °C	3,100 at 20 °C	10,900 at 20 °C	1,600 at 25 °C	14,800 at 25 °C	17,600 at 25 °C
							350 at 60 °C	1,700 at 60 °C	2,600 at 60 °C
Density	g/mL	1.61	1.52	1.68	1.57	1.82	1.61	1.79	2.61
Reactivity		PL*: 48 min at 20 °C	PL*: 45 min at 20 °C	PL*: 38 min at 20 °C	PL*: 48 min at 20 °C	PL*: 48 min at 20 °C	GT*: 40 min at 60°C	GT*: 29 min at 110°C	GT*: 78 min at 110°C
Shore Hardness		A 82	D 48	D 67	D 41	D 59	D 87	D 90	D 90
Glass transition temperature	°C	-35	10	10	0	-5	45	106	140
Operating temperature	°C	-40 to +130	-40 to +130	-40 to +130	-40 to +160	-40 to +160	-40 to +155	-40 to +180	-40 to +180
Thermal conductivity	W/m·K	0.95	0.84	1.09	0.73	1.57	0.97	0.72	1.58
Dielectric strength	kV/mm	30	29	32	31	25	36	> 25	> 25
Fire resistance	UL 94	V0 / 1.5 mm	V0 / 3 mm	V0 / 1.5 mm	V0 / 1.5 mm	V0 / 1.5 mm	V0 / 3 mm	-	-

All products are compliant with RoHS. Our recommendations on the use of the material are based on many years of experience and current scientific and practical knowledge. They are, however, provided without any obligation on our part and do not relieve the buyer of the need for suitability tests. They do not constitute a legal relationship, nor are any protected third party rights whatsoever affected thereby. The technical data overview is not a specification but contains indicative values. No liability accepted for misprints.

\* PL: Pot life; GT: Gel time

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