

## Nuplex Epoxies for Electrical component & Casting Work

Effective 2015

New product	K36	K83	K146	K264
Previous product	K141, K142 & K143	K144	K146	New
Description	Clear, pourable resin	Beige coloured material with fillers	Low viscosity material	Metal filled material
Uses	Potting and cable jointing.	Potting	for impregnation of small coils, armatures, motors	Potting for heat sink / dissipation for low voltage systems.
Max Operating temp, °c	50	50	80	90
Mix ratio by weight Resin / hardener	100 50	100 10	100 25	100 12.5
Viscosity / appearance	Thin	Medium viscous	Thin	Pourable but pasty.
Useable life	20mins	20mins	20mins	15mins
Cure Time @ 20c	Overnight	Overnight	Overnight	Overnight
Dielectric Strength	17-18	17-19	20-22	-
Dielectric constant	4.0-4.1	4.0-4.1	3.9-4.1	-

Notes: K141 is no longer available.

- Mixing by weight is the most reliable, repeatable and accurate. Digital kitchen scales are often very accurate to 1gram or less. Do not alter.
- Useable life depends on the quantity mixed. Whilst 100ml may cure slowly, a mixed 1 It will generate heat and cure very quickly. Beware of exotherm (heat release) in large pour sizes. This will cause expansion, shrinkage and cracking. If in doubt, trial first. Pour in layers.
- All resins have very good electrical resistance. Beware K264 is aluminium filled. At low voltages it is non-conductive but at higher voltages arcing may/ will occur.
- Pour from the base up (ie let the resin rise up) to avoid bubble entrapment.
- K146 and k264 performances are enhanced by post curing at 24hrs@80c.  
**K146 bulk size** is K36 resin bulk size mixed with LC234 hardener. The mix ratio is as for K146: 100 : 25 by weight.
- Other K36 mix ratios**  
K36 resin and K36 hardener 2 : 1 by weight; K36 resin and HY1177 hardener 2 : 1 by weight;
- For all products, curing is accelerated in warm temperatures up to 35c.