

NANOPOX® E 770

NANOPOX® E 770 is a high performance, versatile, nanosilica reinforced epoxy resin for the use in electrical applications like PCBs or impregnating resins. The silica phase consists of surface-modified synthetic SiO₂ nanospheres of very small size (average diameter of 20 nm) with a narrow particle size distribution (maximum diameter 50 nm). Despite the high SiO₂ content of 40 wt%, NANOPOX® E 770 has a comparatively low viscosity due to the agglomerate-free colloidal dispersion of the nanoparticles in the resin.

Technical data (no specification)

Property	Units	Typical Values
Base resin		epoxidized novolac
Appearance		opaque solid
SiO ₂ -content	[wt%]	40
Density @ 20 °C	[g/ml]	1.4
Viscosity @ 50 °C	[mPas]	20 000
Epoxy equivalent weight	[g/eq]	310
Shelf life	[months]	6*

*if stored in the original unopened container

Processing Instructions

NANOPOX® E 770 can be used as any other novolac epoxy resin. However, the colloidal silica in NANOPOX® products tends to agglomerate if the stabilisation is affected by inappropriate formulation components like hydrocarbon solvents (e. g. xylene). Therefore the compatibility between NANOPOX® E 770 and all other formulation components should be tested separately before starting formulation development.

Handling and Storage

NANOPOX® E 770 should be handled in accordance with good industrial practice. Detailed information is provided in the Material Safety Data Sheet.

Keep container(s) tightly closed when not in use!

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