

EPICLON[®] HP-4770

Multi-functional Naphthalene skeleton epoxy resin

General description

EPICLON[®] HP-4770 is a naphthalene modified epoxy resin. This product has both flame Retardancy and high Tg properties. These characteristics satisfy recent severe needs of electronics materials.

Advantages

- Low Melt Viscosity
- Excellent Flame Retardancy (V-0 level without Bromine)
- High Speed Cure
- High Tg
- Low Moisture Absorption
- Low Modulus (at Reflow Temp.)

Typical properties*

Appearance	Solid
Epoxy equivalent, g/eq	204
Softening point, °C	72
Melt Viscosity(ICI/150°C), dPa.s	0.7

* Typical properties; not to be construed as specifications.

Physical properties of resin systems cured with Xylok*.

Gelation Time(175°C), sec	24
Flammability(UL-94V, 1.6mm), sec	V-0
Tg by DMA, °C	158
Modulus(260°C), MPa	35
Moisture absorption,% 85°C/85%RH 300hr	1.1

* Typical properties; not to be construed as specifications.

* Combination and curing condition

Hardener: XLC-3L (Mitsui Chemicals, Inc. Phenol-p-xylene glycol dimethylether polycondensate)

Accelerator: TPP 1phr

Filler: None (UL-94V test; Globular silica, Micron S-COL, 80wt %)

Curing Conditions: 175°C - 5hrs

Storage

EPICLON[®] HP-4770 has a shelf-life of at least 6 month if it is stored in a cool, dry area.