

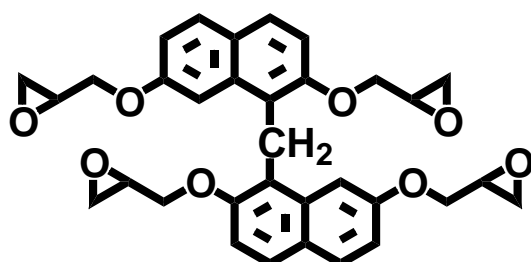
EPICLON[®] HP-4700

Naphthalene tetra-functional type epoxy resin

General description

EPICLON[®] HP-4700 is tetra-functional epoxy resin containing rigid naphthalene skeleton with high symmetry. This epoxy resin can provide the highest level of Tg in all kinds of epoxy resins. Such ultra high Tg can satisfies recent severe needs of electronics materials field.

Chemical structure



Typical properties*

| | |
|------------------------------|-------------|
| Appearance | Blown solid |
| Epoxy equivalent, g/eq | 165 |
| Viscosity, 150°C, mPa.s | 450 |
| Softening point, °C | 90 |
| Hydrolyzable Cl content, ppm | 100 |

* Typical properties; not to be construed as specifications.

Typical formulation

Epoxy resin : **EPICLON[®] HP-4700** (61.3phr)
 Hardener : Phenol novolac resin (PHENOLITE[®] TD-2131, 38.7phr)
 Accelerator : Tri-phenyl phosphine (TPP, 1.0phr)
 Test piece : Unfilled (no silica)
 Curing schedule : 175°C for 5hr

Cured resin properties

| | |
|---------------------------------|------|
| Gel time, 175°C, sec. | 32 |
| Tg by DMA, °C | 245 |
| Moisture absorption, 300hr, %*, | 2.31 |

* 85°C/85%RH

Storage

EPICLON[®] HP-4700 has a shelf-life of at least 6 month if it is stored in a cool, dry area.

Read The Material Safety Data Sheet Before Handling, Storing or Using This product.

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Items mentioned in this information are for customers' reference and limited to certain examples although they are based on the most reliable data obtained by our company. It is hoped that customers make the best use of these products after careful examination.

<http://www.dic.co.jp/en/products/epoxy/index.html>