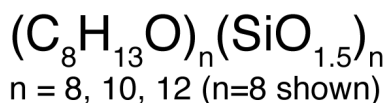
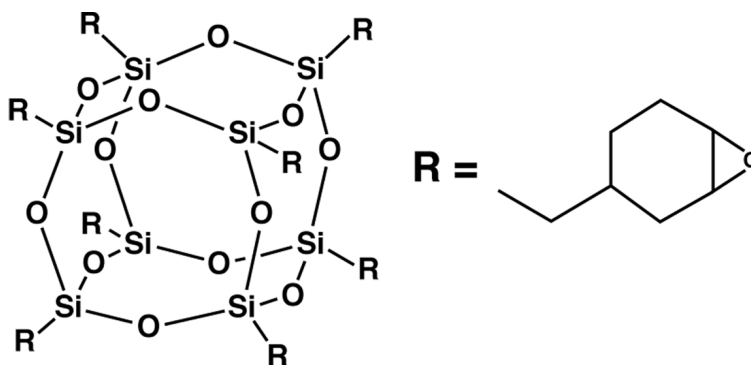


Epoxy cyclohexyl POSS® Cage Mixture

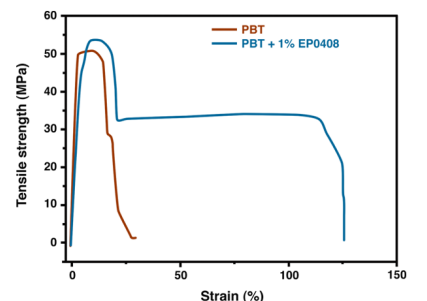
EP0408

EP0408 is a hybrid molecule with an inorganic silsequioxane at the core and organic epoxy cyclohexyl groups attached at the corners of the cage. EP0408 can be cured with aromatic, aliphatic amines and photoinitiators. EP0408 provides increased use temperature, excellent water and solvent resistance, and enhanced thermomechanical performance.



FW 1418.20

Refrigerate

 $D_4^{20} 1.24 \quad n_D^{20} 1.52$
* Cage content $\geq 50\%$ **Key Properties****Epoxy Equivalent Weight:** 177**Appearance:** Clear, pale yellow/orange, semi-solid**Viscosity (@ 60°C):** 500 Poise**Thermal Stability (5% wt loss):** 403°C**Solvent Solubility:** THF, chloroform, isopropanol**Solvent Insolubility:** hexane**Resin Solubility:** aromatic and aliphatic epoxy resins

Effect of 1% loading of EP0408 on Tensile Strength of PBT

Relevant Literature

- Crack-Free 3D Hybrid Microstructures - *ACS Nano*. 2009 Oct 27;3(10):3251-9
- Modified morphology and properties of poly(2,6-dimethyl-1,4-phenylene oxide)/polyamide 6 blends - *European Polymer Journal* 45(8) Aug 2009, 2202
- Passivation Layer of Iron-Based Rare Earth Powders - *US Patent 7,390,579*
- Epoxide Coatings for Stone Consolidation and Conservation - *J. Korean Soc. Cons.* 26:1 (2010) 85-94.
- Improvement of mechanical properties of poly(butylene terephthalate) through chain extension - *JAPS*. 107 (2008) 825-830
- Photodefinable dielectric materials - *J. Elec. Mat.* 39:2 (2010) 149-156

CAS 187333-74-0 Authorizations: None

\$100/100g \$350/kg