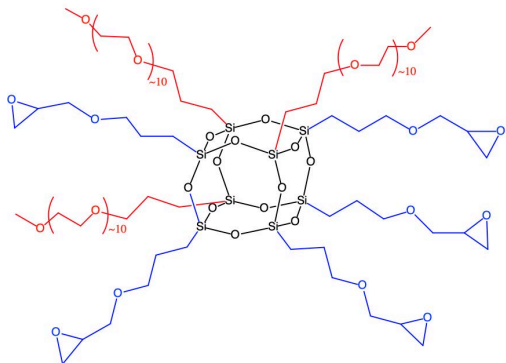


Glycidyl PEG POSS®

Clear, light yellow liquid.



APPLICATIONS

Surface energy control, Wetting and emolliancy. Additionally dispersion and rheological diluency can be realized in certain formulations.

TYPICAL PROPERTIES

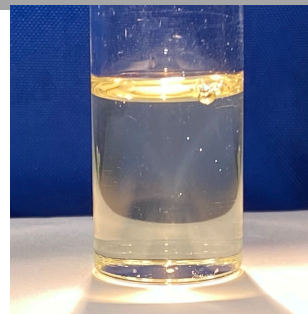
Appearance	Clear, light yellow liquid
Viscosity (@25 °C)	10-20 Pa s
Refractive Index	1.467 @ 20.3 °C
Formula Weight EEW	2533.36 for octamer 507
Solvent Solubility	Alcohol, acetates, ketones
Solvent Insolubility	Water, cyclohexane, PDMS

REGULATORY STATUS

R&D use only at this time.
Not a primary dermal irritant.

HANDLING PRECAUTIONS

Product safety information required for safe use is not included in this document. Before handling, read product and material safety data sheets and container labels for safe use, physical health and hazard information. For material safety data information, contact Hybrid.



BENEFITS

UV cationic and thermal addition cure. The combination of reactivity provides for compatibilization, interfacial control and dispersion. The high crosslinking capability in combination with PEG provides for swelling control of hydrophilic systems while retaining optical transmission.

DESCRIPTION

Glycidyl PEG POSS® is a hybrid molecule with an inorganic silsesquioxane core and organic reactive groups attached at the corners of the cage. Glycidyl PEG POSS® is a molecular union of both functional chemistry and inorganic-organic compositions.

COMPATIBILITY

Glycidyl PEG POSS is provided in neat form and as a concentrate in solvents/monomers and resins.

Glycidyl PEG POSS® is intended to be utilized as an additive. At low additive concentrations compatibility is expected with a wide range of resins and monomers bearing similar chemical functionality.

Compatibility testing is recommended for higher concentrations. Additional information and screening may be provided by Hybrid upon request.

ADDITIONAL DETAILS

Glycidyl PEG POSS® is a mixture of cage sizes 8, 10, 12. The organic groups are randomly distributed around each cage core. **The ratio of glycidyl and PEG groups is an approximate 5:3 molar ratio.**

The distribution of cage size, and functionality around the cage core is analogous to that for functional polymers.

Heteroleptic cage POSS are represented by the catalog designation HC. The structure shown is idealized and should not be considered exact.