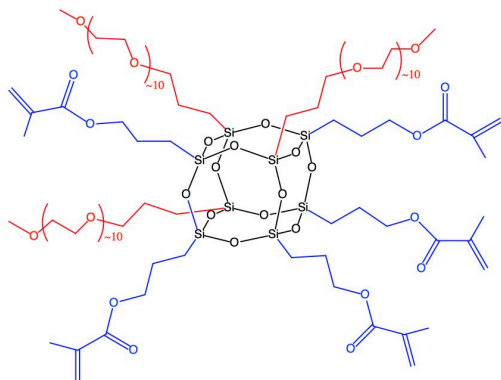


Methacryl PEG POSS®

Clear, light yellow liquid.



APPLICATIONS

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

TYPICAL PROPERTIES

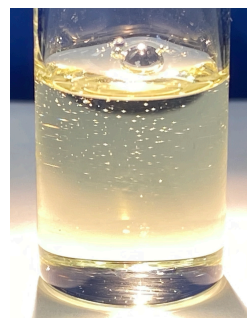
Appearance	Clear, light yellow liquid
Viscosity (@25°C)	120-140 mPa s
Refractive Index	1.467 @ 20.3 °C
Formula Weight	2593.42 for octamer
Solvent Solubility	Water, alcohols, acetates
Solvent Insolubility	Cyclohexane, PDMS

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 free radical and 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

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

COMPATIBILITY

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

Methacryl 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

Methacryl PEG POSS® is provided as a mixture of cage sizes 8, 10, 12. The organic groups are randomly distributed around each cage core. The molar ratio of methacryl and PEG groups is 5:3 for HC0713.53

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

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

MOLAR RATIOS AVAILABLE

6:2 MA:PEG product number HC0713.31

5:3 MA:PEG product number HC0713.53*

2:6 MA:PEG product number HC0713.13*

*water soluble