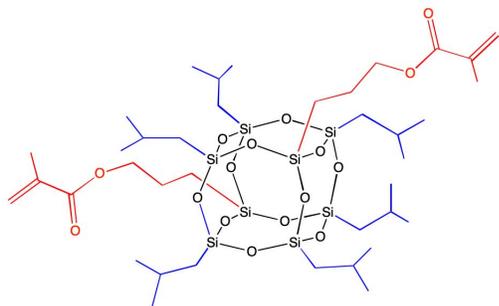


Methacryl isoButyl POSS®

Hazy, viscous liquid.



HC0709.13

APPLICATIONS

Surface energy control, Interfacial compatibilization. Additionally dispersion enhancement and hydrophobicity can be realized in certain formulations.

TYPICAL PROPERTIES

| | |
|------------------------------|--------------------------------|
| Appearance | Hazy viscous liquid |
| HC0709.13 Viscosity (@25 °C) | 6.65 Pa s |
| Refractive Index | 1.460 @ 19.1 °C |
| HC0709.13 Formula Weight | 1013.69 for octamer |
| Solvent Solubility | Cyclohexane, alcohols, ketones |
| Solvent Insolubility | Water |

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 crosslinking capability in combination with isobutyl provides for hydrophobicity and reduced surface energy.

DESCRIPTION

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

COMPATIBILITY

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

Methacryl isobutyl 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 isobutyl POSS® is provided as a mixture of cages sizes 8, 10, 12. The organic groups are randomly distributed around each cage core. The molar ratio of glycidyl and methacryl groups is 6:2 for HC0713.31

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.

ADDITIONAL MOLAR RATIOS & ORGANIC GROUPS ON CAGE ARE AVAILABLE