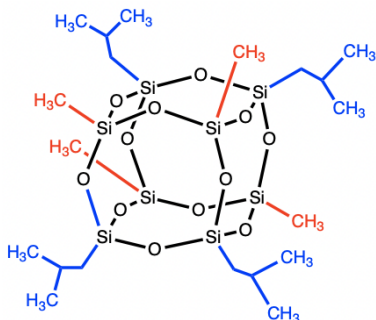


iso-ButylMethyl POSS®

Clear, viscous liquid.



APPLICATIONS

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

TYPICAL PROPERTIES

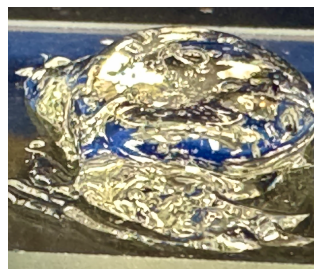
Appearance	Clear viscous liquid
Viscosity (@25°C)	62-66 Pa s
Viscosity (@50°C)	10-14 Pa s
Viscosity (@100°C)	0.2-0.4 Pa s
Refractive Index	1.4395 @ 21 °C
Molecular Weight	1013.69 for octamer
Solvent Solubility	Hydrocarbons & Resins
Solvent Insolubility	Water

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

A soluble liquid version of MS0825 iso-butyl POSS®. This additive is not amenable to aggregation and easily utilized. The isobutyl provides for hydrophobicity and reduced surface energy while the methyl groups provide low carbon content.

DESCRIPTION

Iso-butylmethyl POSS® is a hybrid molecule with an inorganic silsesquioxane core and nonreactive groups attached at the corners of the cage for compatibilization. Iso-butylmethyl POSS® is a rigid molecular union of both organic and inorganic compositions.

COMPATIBILITY

This product is adhesive and provided in neat form. Upon request it can be provided as a concentrate in solvents/monomers and resins.

Iso-butylmethyl 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

Iso-butylmethyl POSS® is designed to contain a mixture of cage sizes 8, 10, 12. The organic groups are randomly distributed around each cage core. The molar ratio of iso-butyl and methyl groups is 1:1 for HC0917.11

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

www.hybridplastics.com