

## Aminopropyl PEG POSS<sup>®</sup> Cage Mixture

### APPEARANCE

Hazy to clear, colorless to pale yellow additive.

### DESCRIPTION

HC0113.11 is a hybrid molecule with an inorganic silsesquioxane core and organic aminopropyl groups for reactivity and PEG10 groups for stability and compatibility.

### APPLICATIONS

HC0113.11 is reactive with epoxy, isocyanate, and anhydride chemistry. It provides enhanced hydrophilicity and unique affinity for dyes and pigments.

It also provides adhesion under common use conditions. In certain applications, the PEG groups provide localized plasticization and wetting of polar surfaces.

As will all POSS additives incorporated into formulation, surface glassification, such as plasma etching, allows for MAR resistance and use as a bondable tie layer.

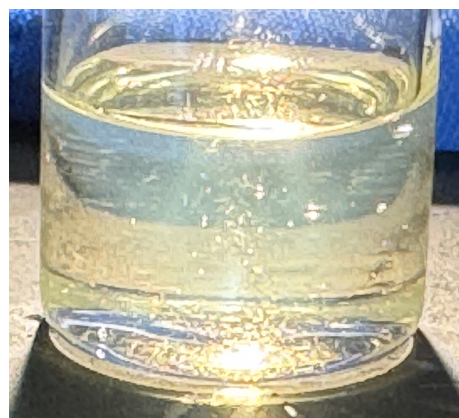
CHARACTERISTICS	
Appearance	clear-hazy, colorless-pale yellow
Viscosity @25°C	1.3 - 1.5 Pa-s
Refractive Index	1.46 @ 20.4 °C
Formula Weight	2703.66
AEW	337.95 g/eq
Insoluble	water
Solubility	THF, ketones, alcohols, hexanes
Resin Solubility	epoxy, urethane, acrylic, aromatic

### REGULATORY STATUS

Pending, R&D use only at this time.

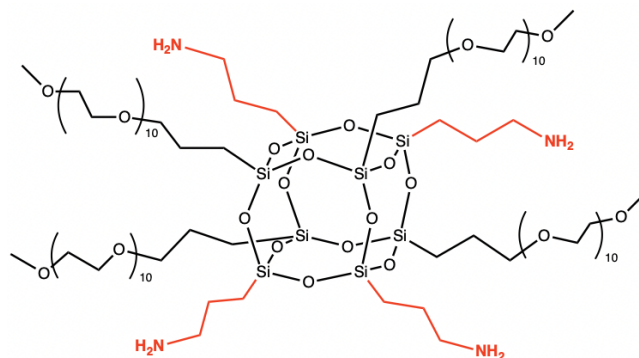
### HANDLING PRECAUTIONS

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



### PRODUCT BENEFITS

HC0113.11 provides high temperature stability and robust resistance to environmental degradation via UV C/B.



### STRUCTURE AND

Compositionally, HC0113.11 POSS is a mixture of cages having 8, 10, and 12 silicon atoms, along with cage-like oligomers. The stoichiometry is statistically random. This is analogous to copolymers. In the case of POSS additives it improves their miscibility and minimizes aggregation.

### ADDITIONAL INFORMATION

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

**ADDITIONAL MOLAR RATIOS AVAILABLE**  
upon request at [info@hybridplastics.com](mailto:info@hybridplastics.com)

[www.hybridplastics.com](http://www.hybridplastics.com) 