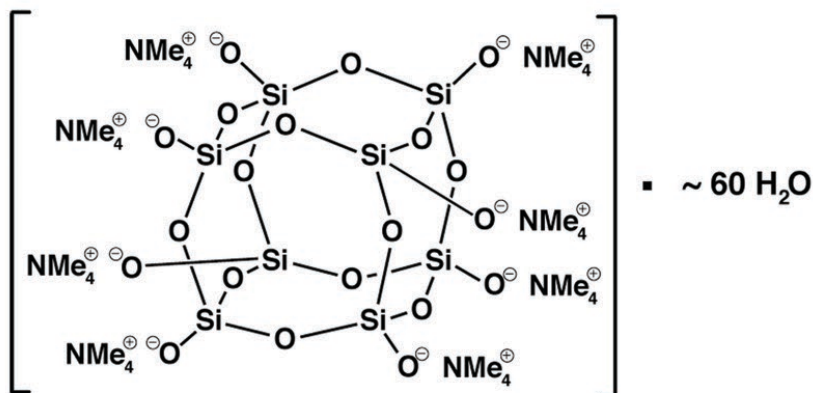


# OctaTMA POSS<sup>®</sup>

MS0860

MS0860 is a hybrid molecule with an inorganic silsequioxane at the core and anionic oxygen and a tetramethyl ammonium ion at the corners of the cage. MS0860 can be used as a glassification aid. It has also been used to improve the luminescence of quantum dots, and as a dispersion agent for nanocarbon and metal oxides.



$C_{32}H_{96}O_{20}Si_8 \cdot \sim 60 H_2O$  FW  $\sim 2218.75$   $D_4^{20}$  1.23

## Key Properties

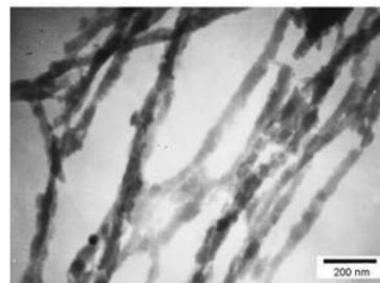
**Appearance:** white powder

**Thermal Stability (5% wt loss):** 67°C

**Solvent Solubility:** water

**Solvent Insolubility:** THF, chloroform, hexane, acetone

**Resin Solubility:** water soluble resins



20% MS0860 in polystyrene self-assembles into reinforcing fibrils

## Relevant Literature

- Fabrication of Lamellar Nanostructure - *J. of Composite Mat.*, 45(3) 2011, 307-319
- Covalent functionalization of metal oxide and carbon nanostructures - *Materials Research Bulletin* 45(12) Dec. 2010, 1894-1898
- Self-assembled quantum dots with enhanced photoluminescence - *Scripta Materialia* 66 (2012) 646-649

CAS 69667-29-4 Authorizations: TSCA

\$125/100g \$350/kg