Hybrid Plastics®

Superior Technology for Superior Products

MA0735 - Methacryl POSS® Cage Mixture

MA0735 is a hybrid molecule with an inorganic silsequioxane at the core, and organic methacrylate groups attached at the corners of the cage. It is a clear, low viscosity, colorless oil. It is soluble in most polar organic solvents, acrylate and methacrylate monomers, and aromatic and aliphatic resins, but is water insoluble. MA0735 can provide fast UV cure, scratch resistance, enhanced mechnical properties, excellent moisture resistance, and increased use temperature.

PHYSICAL PROPERTIES

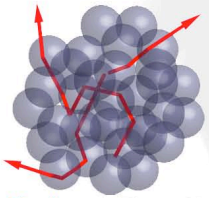
Molecular/Chemical Formula:	$(C_7H_{11}O_2)_n(SiO_{1.5})_n$ n=8, 10, 12
Molecular Weight:	1433 - 2150
Appearance:	clear, colorless oil
Density:	1.20 g/mL
Refractive index:	1.46
Viscosity (@ 25ºC):	18 Poise
Thermal Stability (5% weight loss):	386ºC
Solvent Solubility:	THF, chloroform, acetone, acetonitrile, ethanol
Solvent Insolubility:	water
Resin Solubility:	aromatic and aliphatic resins

AVAILABILITY

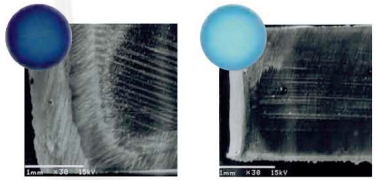
MA0735, and its acrylate counterpart - MA0736, are available in R&D and bulk quantites. Contact us at *info@hybridplastics.com* for a quote.

WARRANTY

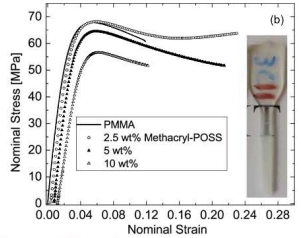
The information contained herein is believed to be accurate and reliable. However, the user is responsible for determining the suitability and use of the final formulations/products. Hybrid Plastics® warrants that its products will meet specifications, but not merchantability or fitness for use.



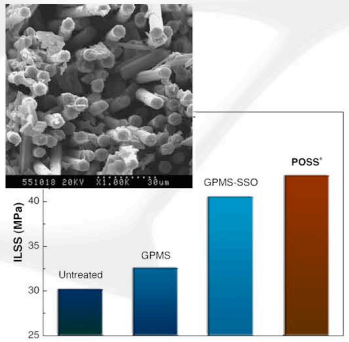
Laser Media - *J. Phys. Chem. C, Vol. 112, No. 38, 208*



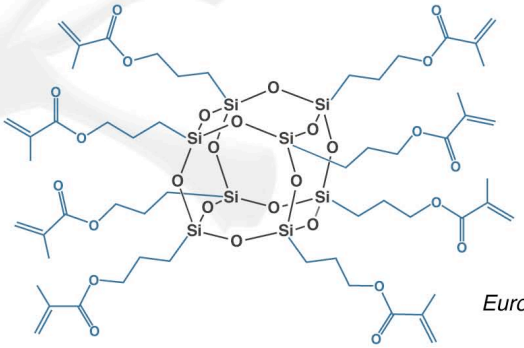
Chemical/Stain Resistant Coating - *US Patent No: 7,470,728 B2*



Polymer Toughener - E.T. Kopesky et al. / Polymer 47 (2006) 299–309

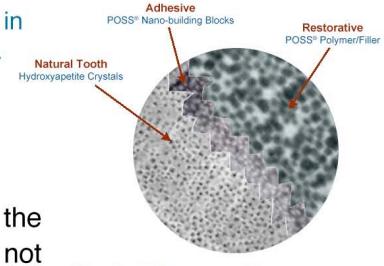


Carbon Fiber Composites - *J. Mater. Sci., Vol. 42, No. 13, 5264.*



MA0735 is an important component in many new materials and products.

Radiation Curable Inks - *European Patent No: EP 1 452 569 B1*



Dental Composite - *US Patent No: 7,160,941 B2*