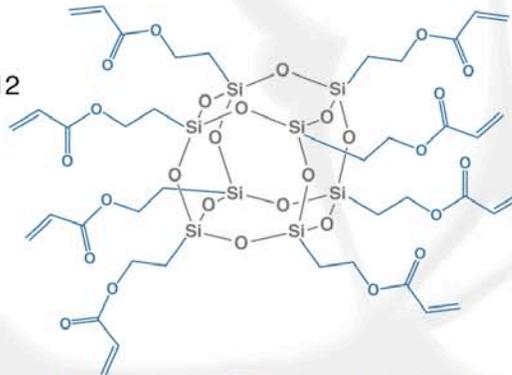


MA0736 for Adhesives

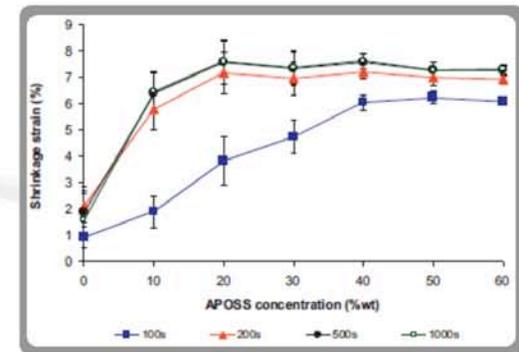
MA0736 is a hybrid molecule with an inorganic silsequioxane at the core, and organic acrylate groups attached at the corners of the cage. It is a clear, low viscosity, colorless liquid. It is soluble in most polar organic solvents, acrylate and methacrylate monomers, but is water insoluble. When combined with 2-octyl cyanoacrylate for adhesives, MA0736 can provide fast UV cure, reduced shrinkage, increased modulus, and reduced water absorption.

PHYSICAL PROPERTIES

Molecular/Chemical Formula:	$(C_6H_9O_2)_n(SiO_{1.5})_n$ n=8, 10, 12
Molecular Weight:	1322 - 1983
Appearance:	clear, colorless liquid
Density:	1.23 g/mL
Refractive index:	1.45
Viscosity (@ 25°C):	22 Poise
Thermal Stability (5% weight loss):	387°C
Solvent Solubility:	THF, chloroform, acetone, acetonitrile, ethanol
Solvent Insolubility:	water, methanol



MA0736 can greatly improve the properties of cyanoacrylate based adhesives



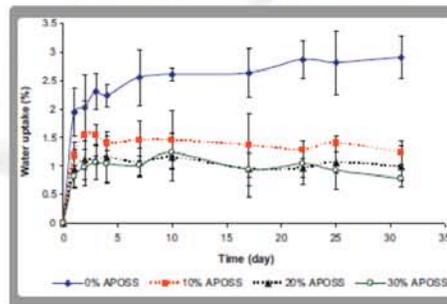
MA0736 can reduce the strain associated with shrinkage that occurs through UV curing

AVAILABILITY

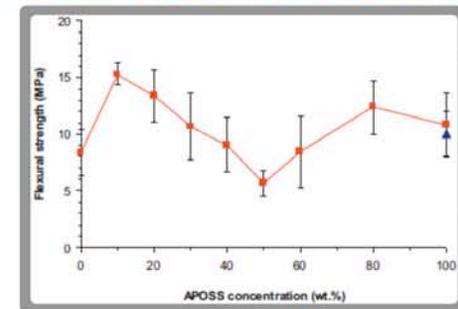
MA0735, and its acrylate counterpart - MA0736, are available in R&D and bulk quantities. Contact us at info@hybridplastics.com for a quote.

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.



MA0736 reduces the amount of water absorbed into the adhesive



After water absorption, MA0736 maintains flexural strength.

Data from: Fadaie, et.al, Dental Materials 29 (2013) e61-e69.