

## Hybrid Plastics POSS® MA0742 Methacryltrimethylsiloxylsobutyl-POSS®

Category : Other Engineering Material , Additive/Filler for Polymer , Polymer , Thermoplastic , Siloxane , Thermoset , Methacrylate

### Material Notes:

POSS® Nanostructured Chemical Technology has two unique features: (1) the chemical composition is a hybrid, intermediate (RSiO<sub>1.5</sub>) between that of silica (SiO<sub>2</sub>) and silicones (R<sub>2</sub>SiO). (2) POSS® molecules are physically large ranging from approximately 1-3 nm.

POSS® materials are thermally and chemically more robust than silicones and their nanostructured architecture imparts unique properties by controlling polymer chain motion at the molecular level. POSS®-Methacrylates possess a hybrid inorganic-organic three-dimensional structure, which contains from one to eight methacryl groups. The majority of POSS®-Methacrylates contain seven non-reactive organic groups and one methacryl group. While the monofunctional methacrylates can be incorporated into thermoplastics by copolymerization or grafting, the multifunctional methacrylates can be used as effective cross-linkers. They react similarly in polymerization, grafting and cross-linking reactions to standard organic monomers. While reacting similarly to simple organic methacrylates, POSS®-Methacrylates impart significant improvements in the thermal, mechanical, and gas separation properties of traditional plastics. Information provided by Hybrid Plastics

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Hybrid-Plastics-POSS-MA0742-Methacryltrimethylsiloxylsobutyl-POSS.php](http://www.lookpolymers.com/polymer_Hybrid-Plastics-POSS-MA0742-Methacryltrimethylsiloxylsobutyl-POSS.php)

Physical Properties	Metric	English	Comments
Molecular Weight	1031.86 g/mol	1031.86 g/mol	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China