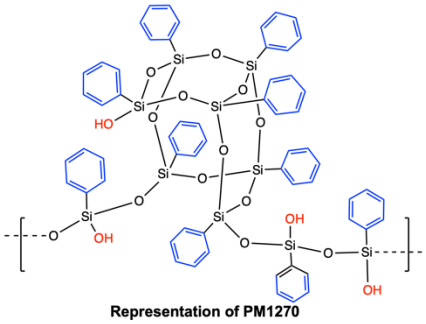
Phenyl Silanol POSS® PM1270 Specification Sheet

√ Compoundable Additive
√ Thermal and UV Stability Improvement
√ Flow Aid for Thermoplastics
√ Dispersant for Pigments and Reinforcements

Hybrid Plastics' sales and development teams work with each customer to ensure the best match of our proprietary Nanostructured® additives to meet application needs and budget. It was in this spirit that phenyl silanol PM1270 was created.



Representation of PM1270

PM1270 is and oligomer of the structurally well-defined trisilanol phenyl POSS® (SO1458). It is designed to be directly incorporated into thermoplastics by compounding or into thermosets via high sheer mixing. Typical use levels range from 0.25 wt% to 3 wt% relative to resin.

PM1270 PROPERTIES

This hybrid resin has an inorganic silsesquioxane core and organic phenyl groups attached at the corners of the cage. The aromatic groups aid in compatibility with most aromatic resins. The silanol groups are reactive and aid in dispersion of filler particulates. Key physical properties are shown below.

Description	Value
Form	white microcrystalline powder
Particle Size Supplied	10-100 micron
Softening Point	>400 °C
Insoluble	Water, MeOH, Hexanes
Solvent Soluble	THF, EtOAC, PGMEA
Resins	Aromatic thermoplastics 3-5% Aromatic epoxies Isobornyl acrylate
Viscosity @450°C	Shear thinning 1 rad/sec = 100 Pa s 10 rad/sec = 15 Pa s 100 rad/sec = ~1 Pa s

PACKAGING, SHELF LIFE

PM1270 is available in re-sealable pails, drums, and other bulk containers. Shelf life is two years.

AVAILABILITY

Directly from Hybrid Plastics and its authorized distributors. Please contact us directly for further information or for a listing of our distributors, www.hybridplastics.com, info@hybridplastics.com, 601-544-3466 voice,.