

## Product Information - SO1458 POSS Affords Flow Enhancement in PPS

# SD6U58.13 PPS

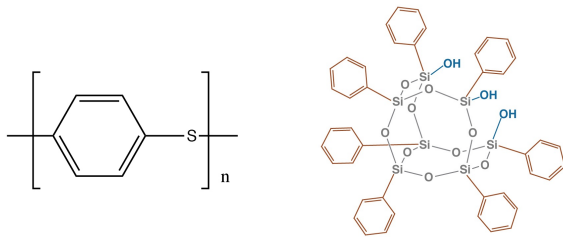
POSS affords flow enhancement in PPS 1200L without a reduction in molecular weight or bimodal grading.

### DESCRIPTION

SO1458 is a hybrid molecule with an inorganic silsequioxane at the core, organic phenyl groups attached at the corners of the cage and three active silanol functionalities.

### APPLICATIONS

SO1458 TrisilanolPhenyl POSS can be used as a processing aid in thermoplastics and thermosets while retaining and enhancing mechanical properties.



### SO1458 PROPERTIES

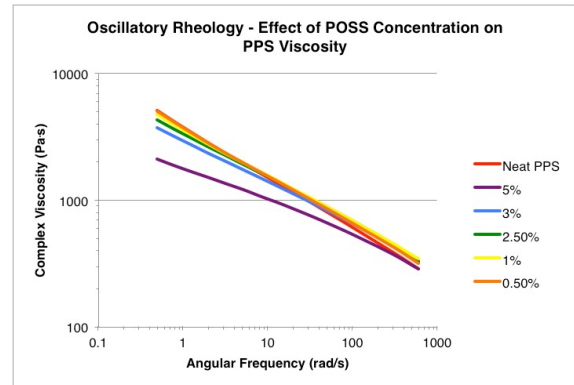
Appearance	White powder
Thermal Stability	366 °C
Solvent Solubility	THF, chloroform, ethanol
Solvent Insolubility	water, hexane
Formula Weight	931.34
Resin Solubility	aromatic and aliphatic resins, oligomers, and polymers (PP, PE, PA, PC, PET, PEEK, PPS)

### REGULATORY STATUS

INCI, TSCA

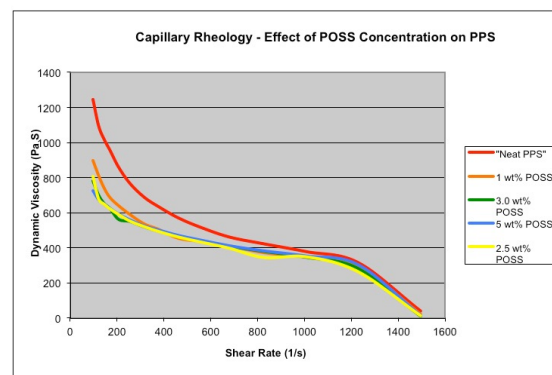
### HANDLING PRECAUTIONS

*Product safety information required for safe use is not included in this document. Before handling, read product and material safety data sheets and container labels for safe use, physical health and hazard information. For material safety data information, contact Hybrid.*



### FEATURE 1:

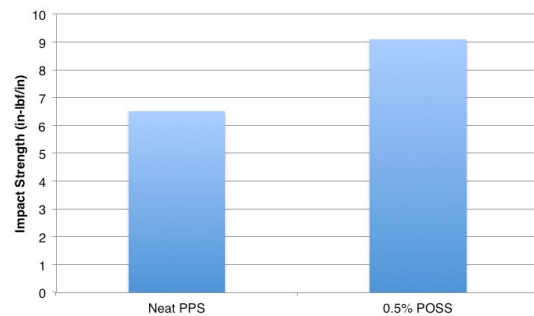
The flow enhancement effect is tailorable relative to POSS SO1458 loading.



### FEATURE 2:

Low shear regions show 28-41% flow enhancement. High shear regions show 46-61% flow enhancement.

### Izod Impact - Effect of POSS on Impact Strength



### FEATURE 3:

Impact property is improved 40% depending on POSS loading level.

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