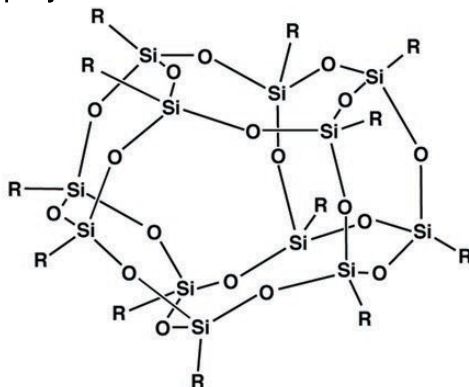


DodecaPhenyl POSS[®]

MS0802

MS0802 is a hybrid molecule with an inorganic silsequioxane at the core and organic phenyl groups attached at the corners of the cage. MS0802 can be used as a prophen in plastics and as a nanoreinforcement in rubber. It has also been used to improve laser marking in fluoropolymers.



R = phenyl

$C_{72}H_{60}O_{18}Si_{12}$

FW 1550.26

D_4^{20} 1.26

n_D^{20} 1.56

Key Properties

Appearance: white powder

Thermal Stability (5% wt loss): 387°C

Solvent Solubility: slightly soluble in THF, chloroform, toluene

Solvent Insolubility: acetone, acetonitrile, methanol

Resin Solubility: thermoplastic resins including fluoropolymers

Relevant Literature

- Pigments and compositions for use in laser marking - *US Patent 6825265*
- Nanoreinforced rubber compound - *US Patent 6852794*
- Porous plastic film - *US Patent 7452593*

CAS 18923-59-6 Authorizations: TSCA

\$150/100g \$317/kg

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