



>>Entry Name: Trimethyl(phenylseleno)silane, 9CI

Synonym(s): Phenyl trimethylsilyl selenide

CAS Registry Number: 33861-17-5

PhSeSiMe<sub>3</sub>

Molecular Formula: C<sub>9</sub>H<sub>14</sub>SeSi

Molecular Weight: 229.255

Accurate Mass: 230.002997

Percentage Composition: C 47.15%; H 6.15%; Se 34.44%; Si 12.25%

Source/Synthesis: Synth. from PhSeH + (Me<sub>3</sub>Si)<sub>2</sub>NH

Use/Importance: Converts aldehydes into hemiselenoacetals; with enones, enals gives 1,4-addn.; reduces sulfoxides → sulfides, selenoxides → selenides, telluroxides → tellurides; ring opens epoxides in presence of ZnI<sub>2</sub> catalyst → β-siloxyalkylphenyl selenides

Physical Description: Air- and moisture-sensitive liq.

Boiling Point: Bp<sub>5</sub> 92-93°

#### References:

Detty, M.R., *Tet. Lett.*, 1978, 5087-5090, (*synth*)

Liotta, D. *et al.*, *Tet. Lett.*, 1978, 5091-5094, (*use, addn to aldehydes, enones, enals*)

Miyoshi, N. *et al.*, *Chem. Lett.*, 1979, 909-912, (*use, ring-opening of epoxides*)

Detty, M.R., *J.O.C.*, 1979, **44**, 4528-4531, (*use, redn*)

Miyoshi, N. *et al.*, *Synthesis*, 1979, 300-301, (*synth, ir, ms, pmr*)

*Fieser and Fieser's Reagents for Organic Synthesis*, Wiley, 1981, **9**, 373, (*synth, use*)

Abe, H. *et al.*, *Chem. Pharm. Bull.*, 1998, **46**, 1311-1313, (*synth, pmr, cmr, Se-77 nmr*)