

# (Trimethylphosphine)(triphenylsilyl)gold(I) and Related Compounds

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Gold-Silicon Compounds, Silyl-Gold Compounds, (Phosphine)gold(I) Complexes

Mononuclear coordination compounds of the type  $(R_3P)AuSiR'_3$  with  $R = R' = Ph$  and  $R = Me, R' = Ph$  have been obtained from reactions of the corresponding halide complexes  $(R_3P)AuCl$  with the silyllithium reagent  $LiSiPh_3$ . The fully phenylated species undergoes ligand redistribution in solution to give homoleptic ionic species.  $(Me_3P)AuSiPh_3$  is less susceptible to this process and crystallizes from solutions as the heteroleptic complex. The crystal structure of this compound has been determined by X-ray diffraction. In the crystal lattice the molecules are not associated.

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