



>>Entry Name: Dichlorotriphenylbismuth, 9Cl

Synonym(s): Triphenylbismuthine dichloride. Triphenylbismuth dichloride

CAS Registry Number: 594-30-9

Related CAS Registry Numbers(s): 28719-54-2

Ph₃BiCl₂

Molecular Formula: C₁₈H₁₅BiCl₂

Molecular Weight: 511.202

Accurate Mass: 510.035453

Percentage Composition: C 42.29%; H 2.96%; Bi 40.88%; Cl 13.87%

Source/Synthesis: Synth. from Ph₃Bi and Cl₂ or SO₂Cl₂

Use/Importance: Phenylating agent: *C* or *O*-phenylates phenols; *C* or *N*-phenylates amines; phenylates ketones, enols, active methylene compds., chromanones and 4-hydroxycoumarins. Cleaves 1,2-diols. Used in oxidn. of phenols and of thiols to disulfides

Physical Description: White cryst. (C₆H₆/petrol)

Melting Point: Mp 159-160°

Other Data: With Pd(OAc)₂ → PhPh; with N₂H₄ or Na₂S₂O₃ → Ph₃Bi

Aldrich: 42740-3

References:

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Goel, R.G. *et al.*, *Can. J. Chem.*, 1970, **48**, 2488, (*synth, ir*)
Brill, T.B. *et al.*, *Inorg. Chem.*, 1970, **9**, 1980, (*nqr*)
Razuvaev, G.A. *et al.*, *Dokl. Akad. Nauk SSSR, Ser. Khim.*, 1975, **225**, 581, (*synth*)
Hoste, S. *et al.*, *J. Electron Spectrosc. Relat. Phenom.*, 1979, **17**, 191, (*pe*)
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Finet, J., *Chem. Rev.*, 1989, **89**, 1487, (*use*)