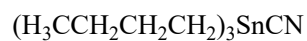




>>Entry Name: Tributylecyanostannane

Synonym(s): Tributylstannanecarbonitrile, 12Cl. Tributyltin cyanide

CAS Registry Number: 2179-92-2



Molecular Formula: $\text{C}_{13}\text{H}_{27}\text{NSn}$

Molecular Weight: 316.073

Accurate Mass: 315.116549

Percentage Composition: C 49.40%; H 8.61%; N 4.43%; Sn 37.56%

Source/Synthesis: Synth. from $\text{Bu}_3\text{SnCl} + \text{KCN}$

Use/Importance: Couples with acyl halides without a catalyst $\rightarrow$ acyl nitriles; couples with aryl halides in the presence of Pd complex catalysts

Physical Description: Cryst. (MeCN)

Melting Point: Mp 88.5° (83°)

Other Data: Subl. *in vacuo*

Aldrich: 23516-4

Sigma: T3393

Other: Gelest SNT8087

References:

Lorberth, J., *Chem. Ber.*, 1965, **98**, 1201, (*synth, anal, ir*)

Tanaka, M., *Tet. Lett.*, 1980, **21**, 2959, (*synth, use, subst of acyl halides*)

Barbieri, R. *et al.*, *Inorg. Chim. Acta*, 1985, **97**, 113, (*Sn-119 Mössbauer*)

Stille, J.K., *Angew. Chem., Int. Ed.*, 1986, **25**, 508, (*use, subst of aryl halides*)

Pereyre, M. *et al.*, *Tin in Organic Synthesis*, Butterworths, 1987, (*rev, uses*)