>>**Entry Name: Tetrakis(diethylamido)titanium(*IV*)**
Synonym(s): Tetrakis(*N*-ethylethanaminato)titanium. Titanium tetrakis(diethylamide)

CAS Registry Number: 4419-47-0

$Ti(NEt_2)_4$

Molecular Formula: $C_{16}H_{40}N_4Ti$
Molecular Weight: 336.399
Accurate Mass: 336.273243
Percentage Composition: C 57.13%; H 11.98%; N 16.65%; Ti 14.23%
Source/Synthesis: Synth. by addn. of EtMgBr and Et_2NH to $TiCl_4$.2THF, or from Et_2NLi and $TiCl_4$ in toluene
Use/Importance: Used for *in situ* protection of aldehydes and ketones, for conjugate Et_2N addn. to α,β-unsatd. esters and ketones and for Et_2N-transfer to carboxylic and phosphonic acid esters
Physical Description: Air-sensitive pale orange liq.
Boiling Point: $Bp_{0.3}$ 112°
Solubility: Sol. THF, Et_2O, CH_2Cl_2
Density: d_4^{20} 0.931

Aldrich: 40739-9
Fluka: 87590

References:

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Reetz, M.T. *et al.*, *Synthesis*, 1983, 540, *(synth)*
Steinborn, D. *et al.*, *Synthesis*, 1989, 304, *(synth, cmr)*
Berger, S. *et al.*, *Magn. Reson. Chem.*, 1990, **28**, 559, *(Ti-47 nmr, Ti-49 nmr)*
Reetz, M.T.*, Organometallics in Synthesis*, (Ed. Schlosser, M.), Wiley, 1994, 257, *(synth, cmr, use)*
Encyclopaedia of Reagents for Organic Synthesis, (ed. Paquette, L.A.), Wiley, 1995, **7**, 4936, *(synth, cmr, use)*
Synthetic Methods of Organometallic and Inorganic Chemistry, (ed. Hermann, W.A.), Thieme, 1996, **1**, 98-99, *(synth, cmr)*