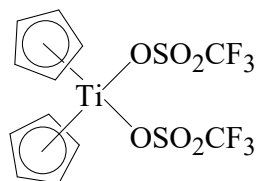




>>Entry Name: Bis(η^5 -2,4-cyclopentadien-1-yl)bis(trifluoromethanesulfonato-*O*)titanium, 12Cl



CAS Registry Number: 76262-87-8

Molecular Formula: C₁₂H₁₀F₆O₆S₂Ti

Molecular Weight: 476.21

Accurate Mass: 475.930245

Percentage Composition: C 30.27%; H 2.12%; F 23.94%; O 20.16%; S 13.47%; Ti 10.05%

Source/Synthesis: Synth. from Cp₂TiCl₂ and AgOTf in THF

Use/Importance: Catalyses Mukaiyama crossed-aldol reactions and reactions of allylsilanes with ketones and acetals (Sakurai reaction)

Physical Description: Red cryst. (CH₂Cl₂/pentane or THF/hexane), air-stable for short periods

Solubility: Sol. CH₂Cl₂, MeNO₂; insol. C₆H₆, hexane

Other Data: Often generated and used *in situ*

References:

Thewalt, U. *et al.*, *Z. Kristallogr.*, 1980, **153**, 307

Hollis, T.K. *et al.*, *Tet. Lett.*, 1992, **33**, 6423; 1993, **34**, 4309, (*use*)

Edwards, J.P. *et al.*, *Encyclopaedia of Reagents for Organic Synthesis*, (ed. Paquette, L.A.), Wiley, 1995, **1**, 481, (*synth, pmr, use*)