



>>Entry Name: Tin(II) trifluoromethanesulfonate

Synonym(s): Trifluoromethanesulfonic acid tin(2+) salt. Bis(trifluoromethanesulfonato)tin. Stannous triflate

CAS Registry Number: 62086-04-8

$\text{Sn}(\text{OSO}_2\text{CF}_3)_2$

Molecular Formula: $\text{C}_2\text{F}_6\text{O}_6\text{S}_2\text{Sn}$

Molecular Weight: 416.851

Accurate Mass: 415.806248

Percentage Composition: C 5.76%; F 27.35%; O 23.03%; S 15.38%; Sn 28.48%

Source/Synthesis: Synth. from SnO and $\text{F}_3\text{CSO}_3\text{H}$, or from SnCl_2 and excess $\text{F}_3\text{CSO}_3\text{H}$ under N_2

Use/Importance: Use in synth. of esters from silyl carboxylates and silyl esters; has many catalytic applications, e.g. in addn. reaction of Schiff bases with ketenes

Other Data: Ir $\nu_{\text{SO}_3(\text{asym})}$ 1331, 1272, 1202; $\nu_{\text{SO}_3(\text{sym})}$ 1035, 1033, 1010, 996; $\nu_{\text{CF}_3(\text{sym})}$ 1234, 1225; $\nu_{\text{CF}_3(\text{asym})}$ 1181, 1156 cm^{-1} (MeCN)

Aldrich: 38812-2

Fluka: 96565

Other: Gelest SNT 7993

References:

Bergström, P.-}A. *et al.*, *J. Phys. Chem.*, 1995, **99**, 12603, (*synth, ir, Raman*)