



>>Entry Name: Silver trifluoroacetate

Synonym(s): Trifluoroacetic acid silver(1+) salt. Trifluoroacetatosilver

Extra CAS Registry Numbers(s): 2966-50-9

AgOOCF₃

Molecular Formula: C₂AgF₃O₂

Molecular Weight: 220.884

Accurate Mass: 219.890131

Percentage Composition: C 10.88%; Ag 48.83%; F 25.80%; O 14.49%

Source/Synthesis: Synth. from Ag₂O and F₃CCOOH in H₂O at 50-60° or in H₂O at pH 5.7

Use/Importance: Lewis acid catalyst for regioselective alkylation

Physical Description: White solid

Melting Point: Mp 257-260 dec.°

References:

Hauptschein, M. *et al.*, *J.A.C.S.*, 1951, **73**, 2461, (*synth*)

Rottenberg, M., *Helv. Chim. Acta*, 1953, **36**, 1115, (*synth*)

Crawford, G.H. *et al.*, *J.A.C.S.*, 1955, **77**, 2605, (*synth, use*)

Mehring, M. *et al.*, *J. Chem. Phys.*, 1971, **55**, 746, (*F-19 nmr*)

Griffin, R.G. *et al.*, *J. Chem. Phys.*, 1972, **57**, 2147, (*F-19 nmr*)

Waugh, J.S. *et al.*, *Magn. Reson. Relat. Phenom. Proc. Congr. Ampere, 17th, 1972, 1972*, **11**; *CA*, **80**, 139081, (*cmr*)

Christie, K.O. *et al.*, *Spectrochim. Acta A*, 1973, **29**, 2017, (*ir, Raman*)

Adams, S.K. *et al.*, *Inorg. Chim. Acta*, 1975, **12**, 163, (*ir, ms*)

Wagner, C.D., *Faraday Discuss. Chem. Soc.*, 1976, **60**, 291, (*Auger*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1982, **10**, 355, (*use*)

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