



>>Entry Name: Sodium trifluoroacetate

Synonym(s): Trifluoroacetic acid, sodium salt, 8Cl. Sodium trifluoroethanoate. Trifluoroethanoic acid, sodium salt

CAS Registry Number: 2923-18-4

NaOCCF₃

Molecular Formula: C₂F₃NaO₂

Molecular Weight: 136.006

Accurate Mass: 135.974806

Percentage Composition: C 17.66%; F 41.91%; Na 16.90%; O 23.53%

Source/Synthesis: Manuf. by electrolysis of aq. HF solns. of AcOH or by oxidn. of F₃CCCl=CCl₂ with NaOCl (+5% KMnO₄) in the presence of NaOH

Use/Importance: Commercially available. Used in manuf. of perfluoroalkylaromatic compds.

Physical Description: Hygroscopic. Reacts with F₂ to form F₃COF, F₃CCH₂OF and F₃CCF₂OOF and with I₂ to form CF₃CI

Melting Point: Mp 207 dec.°

Solubility: V. sol. H₂O

Aldrich: 13210-1

Fluka: 91731

Sigma: T0757

References:

- Aldrich Library of FT-IR Spectra, 1st edn.*, 1985, **1**, 549D, (*ir*)
Swarts, F., *Bull. Soc. Chim. Belg.*, 1939, **48**, 176, (*synth*)
Hazledine, R.N., *J.C.S.*, 1951, 584, (*reaction with I₂*)
Gelius, U. *et al.*, *Phys. Scr.*, 1970, **2**, 70, (*pe*)
Jones, R.G. *et al.*, *J.A.C.S.*, 1973, **95**, 2465, (*pmr*)
Christie, K.O. *et al.*, *Spectrochim. Acta A*, 1973, **29**, 2017, (*ir, Raman*)
Lerman, O. *et al.*, *J.O.C.*, 1980, **45**, 4122, (*reaction with F₂*)
Dallenbach, R. *et al.*, *J. Therm. Anal.*, 1981, **20**, 409, (*thermal dec*)
Japan. Pat., 1982, 57 139 025; *CA*, 1983, **98**, 71646, (*uses*)
Japan. Pat., 1985, 60 204 759; *CA*, 1986, **104**, 109470, (*uses*)
Tissot, P. *et al.*, *Thermochim. Acta*, 1986, **106**, 377, (*thermal dec*)
Sigma-Aldrich Library of Chemical Safety Data, 1988, **2**, 3439D, (*haz*)