



>>Entry Name: **2,2,3,3-Tetrafluoropropanoic acid**, 9CI

Synonym(s): Flupropanate, BSI, ISO

CAS Registry Number: 756-09-2

$\text{F}_2\text{CHCF}_2\text{COOH}$

Molecular Formula: $\text{C}_3\text{H}_2\text{F}_4\text{O}_2$

Molecular Weight: 146.041

Accurate Mass: 145.999092

Percentage Composition: C 24.67%; H 1.38%; F 52.04%; O 21.91%

Boiling Point: Bp 134°

>>Derivative: Na salt

Synonym(s): **Tetrapion**, JMAF. Flupropanate-sodium. Orga 3045. Frenock

CAS Registry Number: 22898-01-7

Use/Importance: Herbicide

Physical Description: Cryst.

Melting Point: Mp 152°

Hazard & Toxicity: LD₅₀ (rat, orl) 11900 mg/kg

>>Derivative: Et ester

CAS Registry Number: 337-82-6

Molecular Formula: $\text{C}_5\text{H}_6\text{F}_4\text{O}_2$

Molecular Weight: 174.095

Accurate Mass: 174.030392

Percentage Composition: C 34.50%; H 3.47%; F 43.65%; O 18.38%

Melting Point: Mp 108-109°

References:

Henre, A.L., *J.A.C.S.*, 1954, **76**, 479, (*synth*)

Brocks, J.A. *et al.*, *Chem. Ber.*, 1970, **103**, 1692, (*F-19 nmr, ester*)

Caseley, J.C. *et al.*, *Proc. Br. Weed Control Conf.*, 10th, 1970, **1**, 320; 326, (*activity, use*)

Atherton, J.H. *et al.*, *J.C.S.(C)*, 1971, 366, (*synth, ester*)

Japan. Pat., 1981, 80 102 505; *CA*, **94**, 97982y, (*synth*)

Pesticide Manual, 10th edn., 1994, No. 337