



>>Entry Name: 4-Fluoro-1-naphthalenecarboxylic acid, 9CI

Synonym(s): 4-Fluoro-1-naphthoic acid, 8CI

CAS Registry Number: 573-03-5

Structure by analogy with 1-Fluoro-2-naphthalenecarboxylic acid, [BJN20-M](#)

Molecular Formula: C₁₁H₇FO₂

Molecular Weight: 190.173

Accurate Mass: 190.043008

Percentage Composition: C 69.47%; H 3.71%; F 9.99%; O 16.83%

Physical Description: Needles (EtOH aq.)

Melting Point: Mp 224-225°

Aldrich: 28945-0

Sigma: F5261

>>Derivative: Me ester

CAS Registry Number: 13772-56-0

Molecular Formula: C₁₂H₉FO₂

Molecular Weight: 204.2

Accurate Mass: 204.058658

Percentage Composition: C 70.58%; H 4.44%; F 9.30%; O 15.67%

Physical Description: Plates (petrol)

Melting Point: Mp 52-53°

>>Derivative: Nitrile

Synonym(s): 1-Cyano-4-fluoronaphthalene

CAS Registry Number: 13916-99-9

Molecular Formula: C₁₁H₆FN

Molecular Weight: 171.173

Accurate Mass: 171.048427

Percentage Composition: C 77.19%; H 3.53%; F 11.10%; N 8.18%

Physical Description: Needles (petrol)

Melting Point: Mp 89.5-90.5°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 1169A, (*nmr*)

Dewar, M.J.S. *et al.*, *J.A.C.S.*, 1967, **89**, 379; 386; 1975, **97**, 2198, (*synth, nmr*)