



>>Entry Name: **3-(4-Fluorophenyl)-2-propenoic acid**, 9CI

Synonym(s): *p*-Fluorocinnamic acid

CAS Registry Number: 459-32-5

Structure by analogy with 3-(2-Fluorophenyl)-2-propenoic acid, [DTM91-R](#)

Molecular Formula: C₉H₇FO₂

Molecular Weight: 166.151

Accurate Mass: 166.043008

Percentage Composition: C 65.06%; H 4.25%; F 11.43%; O 19.26%

Aldrich: 22272-0

Rare Chemicals Library: S38654-5

>>Variant: (*E*)-form

CAS Registry Number: 14290-86-9

Molecular Formula: C₉H₇FO₂

Molecular Weight: 166.151

Accurate Mass: 166.043008

Percentage Composition: C 65.06%; H 4.25%; F 11.43%; O 19.26%

Melting Point: Mp 203°

>>Derivative: Et ester

CAS Registry Number: 24393-50-8

Extra CAS Registry Numbers(s): 352-03-4

Molecular Formula: C₁₁H₁₁FO₂

Molecular Weight: 194.205

Accurate Mass: 194.074308

Percentage Composition: C 68.03%; H 5.71%; F 9.78%; O 16.48%

Melting Point: Mp 29-30°

Boiling Point: Bp₅ 130-131°

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 179C, (*ir*)

Aldrich Library of ¹³C and ¹H FT NMR Spectra, 1992, **2**, 1050B, (*nmr*)

Dombrovskii, V.A. *et al.*, *Izv. Vyssh. Uchebn. Zaved., Khim. Khim. Tekhnol.*, 1971, **14**, 895; *CA*, **76**, 3510w, (*synth*)

Japan. Pat., 1975, 75 70 589; *CA*, **84**, 72652w