



>>Entry Name: 4'-Fluoroacetophenone

Synonym(s): 1-(4-Fluorophenyl)ethanone, 9CI

CAS Registry Number: 403-42-9

Structure by analogy with 2'-Fluoroacetophenone, [DTM05-U](#)

Molecular Formula: C₈H₇FO

Molecular Weight: 138.141

Accurate Mass: 138.048093

Percentage Composition: C 69.56%; H 5.11%; F 13.75%; O 11.58%

Melting Point: Mp -4.5°

Boiling Point: Bp₂₅ 106-107°. Bp₁₀ 77-78°

Density: d₄²⁵ 1.14

pKa Value: pK_{a1} -6.06 (25°, H₂SO₄ aq.)

Aldrich: F320-7

Fluka: 46450

Sigma: F7750

>>Derivative: Semicarbazone

Melting Point: Mp 219°

>>Derivative: 4-Nitrophenylhydrazone

CAS Registry Number: 348-02-7

Melting Point: Mp 223°

>>Derivative: 2,4-Dinitrophenylhydrazone

CAS Registry Number: 345-10-8

Melting Point: Mp 235°

References:

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Kitano, H. *et al.*, *Nippon Kagaku Kaishi*, 1955, **58**, 54

Tirpathi, G.N.R. *et al.*, *Indian J. Pure Appl. Phys.*, 1973, **11**, 842, (*ir*)

Caplin, G.A., *Org. Magn. Reson.*, 1974, **6**, 99, (*nmr*)

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