



>>Entry Name: 4,4'-Difluorobenzophenone

Synonym(s): Bis(4-fluorophenyl)methanone

CAS Registry Number: 345-92-6

Molecular Formula: C₁₃H₈F₂O

Molecular Weight: 218.202

Accurate Mass: 218.054321

Percentage Composition: C 71.56%; H 3.70%; F 17.41%; O 7.33%

Physical Description: Cryst. (petrol)

Melting Point: Mp 107.5-108.5°

Aldrich: 11549-5

Fluka: 36914

>>Derivative: Oxime

Molecular Formula: C₁₃H₉F₂NO

Molecular Weight: 233.217

Accurate Mass: 233.06522

Percentage Composition: C 66.95%; H 3.89%; F 16.29%; N 6.01%; O 6.86%

Physical Description: Cryst. (toluene)

Melting Point: Mp 137-138°

>>Derivative: Di-Me ketal

Molecular Formula: C₁₅H₁₄F₂O₂

Molecular Weight: 264.271

Accurate Mass: 264.096186

Percentage Composition: C 68.17%; H 5.34%; F 14.38%; O 12.11%

Physical Description: Cryst. (MeOH)

Melting Point: Mp 52°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 889B, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 61D, (*ir*)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1269A, (*ir*)

Dunlop, R.D. *et al.*, *J.A.C.S.*, 1933, **55**, 1665, (*synth*)

Taft, R.W. *et al.*, *J.A.C.S.*, 1966, **88**, 3058; 1967, **89**, 2391; 1975, **97**, 1612, (*synth, deriv, nmr*)

Maginn, S.J. *et al.*, *Acta Cryst. C*, 1994, **50**, 254, (*cryst struct*)