



>>Entry Name: 4'-Methylbenzophenone-2-carboxylic acid

Synonym(s): 2-(4-Methylbenzoyl)benzoic acid, 9Cl. 2-*p*-Toluoylbenzoic acid, 8Cl. 2-*p*-Toluybenzoic acid

CAS Registry Number: 85-55-2

Molecular Formula: C₁₅H₁₂O₃

Molecular Weight: 240.258

Accurate Mass: 240.078645

Percentage Composition: C 74.99%; H 5.03%; O 19.98%

Physical Description: Prisms + 1H₂O (EtOH/toluene)

Melting Point: Mp 146°

Aldrich: 34502-4

Rare Chemicals Library: S39624-9

>>Derivative: Me ester

CAS Registry Number: 6424-25-5

Molecular Formula: C₁₆H₁₄O₃

Molecular Weight: 254.285

Accurate Mass: 254.094295

Percentage Composition: C 75.58%; H 5.55%; O 18.88%

Physical Description: Plates (MeOH)

Melting Point: Mp 61°

>>Derivative: Et ester

CAS Registry Number: 51476-09-6

Molecular Formula: C₁₇H₁₆O₃

Molecular Weight: 268.312

Accurate Mass: 268.109945

Percentage Composition: C 76.10%; H 6.01%; O 17.89%

Melting Point: Mp 68-69°

>>Derivative: Amide

Molecular Formula: C₁₅H₁₃NO₂

Molecular Weight: 239.273

Accurate Mass: 239.094629

Percentage Composition: C 75.30%; H 5.48%; N 5.85%; O 13.37%

Physical Description: Needles (H₂O)

Melting Point: Mp 175-176°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 1068A, (*nmr*)

Org. Synth., Coll. Vol., 1, 1932, 503, (*synth*)

Ballantine, J.A. *et al.*, *Org. Mass Spectrom.*, 1968, **1**, 425, (*ms*)

Weeks, D.P. *et al.*, *J.O.C.*, 1973, **38**, 3383, (*synth, uv, ir*)