



>>Entry Name: 2,2',4,4'-Tetrahydroxybenzophenone

Synonym(s): Bis(2,4-dihydroxyphenyl)methanone, 9Cl. Benzophenone 2

CAS Registry Number: 131-55-5

Molecular Formula: C₁₃H₁₀O₅

Molecular Weight: 246.219

Accurate Mass: 246.052825

Percentage Composition: C 63.42%; H 4.09%; O 32.49%

Physical Description: Needles (H₂O)

Melting Point: Mp 196-198°

Hazard & Toxicity: Eye irritant. LD₅₀ (rat, orl) 1220 mg/kg

Aldrich: T1640-3

Rare Chemicals Library: S28067-4

>>Derivative: 4,4'-Di-Me ether

Synonym(s): 2,2'-Dihydroxy-4,4'-dimethoxybenzophenone

CAS Registry Number: 131-54-4

Molecular Formula: C₁₅H₁₄O₅

Molecular Weight: 274.273

Accurate Mass: 274.084125

Percentage Composition: C 65.69%; H 5.14%; O 29.17%

Use/Importance: Light stabiliser for polymers. Sunscreen

Melting Point: Mp 133-136°

Aldrich: D11100-7

Rare Chemicals Library: S26581-0

>>Derivative: Tetra-Me ether

Synonym(s): 2,2',4,4'-Tetramethoxybenzophenone

Molecular Formula: C₁₇H₁₈O₅

Molecular Weight: 302.326

Accurate Mass: 302.115425

Percentage Composition: C 67.54%; H 6.00%; O 26.46%

Melting Point: Mp 126-128°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 896B; 897C, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 66A; 66D, (ir)

Grover, P.K. *et al.*, *J.C.S.*, 1955, 3982

Schlemper, E.O., *Acta Cryst. B*, 1982, **38**, 554, (cryst struct)

Merck Index, 11th edn., 1989, No. 1109

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, BCS325