



>>Entry Name: 2,5-Dimethylbenzaldehyde

CAS Registry Number: 5779-94-2

Structure by analogy with 2,3-Dimethylbenzaldehyde, [DZV31-I](#)

Molecular Formula: C₉H₁₀O

Molecular Weight: 134.177

Accurate Mass: 134.073165

Percentage Composition: C 80.56%; H 7.51%; O 11.92%

Physical Description: Liq.

Boiling Point: Bp₇₃₈ 220°. Bp₃ 66°

Refractive Index: n_D²⁰ 1.5440

Other Data: Oxidizes rapidly on contact with air

Aldrich: 15106-8

>>Derivative: (E)-Oxime

Molecular Formula: C₉H₁₁NO

Molecular Weight: 149.192

Accurate Mass: 149.084064

Percentage Composition: C 72.46%; H 7.43%; N 9.39%; O 10.72%

Physical Description: Needles (EtOH aq.)

Melting Point: Mp 64-65°

>>Derivative: (Z)-Oxime

Physical Description: Needles

Melting Point: Mp 139° (135°)

>>Derivative: Semicarbazone

CAS Registry Number: 18102-20-0

Physical Description: Needles

Melting Point: Mp 217°

>>Derivative: *p*-Nitrophenylhydrazone

Physical Description: Red cryst.

Melting Point: Mp 182°

>>Derivative: 2,4-Dinitrophenylhydrazone

Melting Point: Mp 224° (214-215°)

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 950C, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 116A, (*ir*)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1296A, (*ir*)

Gattermann, L., *Annalen*, 1912, **393**, 215, (*synth*)

Hinkel, L.E. *et al.*, *J.C.S.*, 1932, 2793, (*synth*)

Weygand, F. *et al.*, *Chem. Ber.*, 1955, **88**, 301, (*synth*)

Stiles, M. *et al.*, *J.O.C.*, 1960, **25**, 1691, (*synth*)

Sato, K. *et al.*, *Bull. Chem. Soc. Jpn.*, 1968, **41**, 442, (*synth*)

Vander Stouw, G.G. *et al.*, *J.A.C.S.*, 1972, **94**, 1655, (*synth*)

Michelot, D. *et al.*, *Bull. Soc. Chim. Fr.*, 1976, 1482, (*synth*, *pmr*)

Venkoji, P., *Proc. Indian Acad. Sci., Chem. Sci.*, 1984, **93**, 105, (*ir*, *Raman*)