



>>Entry Name: 3,4-Dimethylbenzaldehyde

Synonym(s): 3,4-Xylylaldehyde

CAS Registry Number: 5973-71-7

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: Bp 225-226°. Bp₄ 83-84°

Rare Chemicals Library: S53201-0

>>Derivative: 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 (petrol)

Melting Point: Mp 106°

>>Derivative: Semicarbazone

Physical Description: Needles

Melting Point: Mp 227-228° (rapid heat)

>>Derivative: Phenylhydrazone

Physical Description: Cryst. (EtOH)

Melting Point: Mp 96° (90.5°)

>>Derivative: 2,4-Dinitrophenylhydrazone

Physical Description: Cryst. (xylene)

Melting Point: Mp 231° (225°)

References:

Sadtler Standard C-13 NMR Spectra, 21234, (cmr)

Sadtler Standard NMR Spectra, 42073, (pmr)

Gattermann, L., *Annalen*, 1906, **347**, 347, (synth)

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

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

Hunsberger, M., *J.A.C.S.*, 1955, **77**, 2466, (synth)

Clark, R.J. *et al.*, *Br. J. Pharmacol.*, 1958, **13**, 424; *CA*, **53**, 18025b, (synth)

Rieche, A. *et al.*, *Chem. Ber.*, 1960, **93**, 88, (synth)

Rahm, A. *et al.*, *Synth. Commun.*, 1982, **12**, 485, (synth)