



>>Entry Name: 4-(Dimethylamino)benzaldehyde, 9CI

Synonym(s): Ehrlich's reagent



CAS Registry Number: 100-10-7

Extra CAS Registry Numbers(s): 28602-27-9

Type of Compound Code(s): PG5250 PS8300 PG5480

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%

Use/Importance: Used as 5% EtOH soln. in photometric detn. of N₂H₄ ($\lambda_{\max}$ 455 nm). Reagent for conversion of alkyl halides to aldehydes. Used as 1% soln. in acidified MeOH for detn. of amines, indoles, ergot alcohols and pyrrolizidine alkaloids

Physical Description: Cryst.

Melting Point: Mp 74°

Boiling Point: Bp₁₇ 176-177°

Solubility: Sol. alcohols

Hazard & Toxicity: LD₅₀ (rat, ipr) 620 mg/kg

Aldrich: 15647-7

Fluka: 39080

Sigma: D2004

>>Derivative: Hydrochloride

CAS Registry Number: 5988-39-6

Physical Description: Cryst.

Melting Point: Mp 107-109°

>>Derivative: (E)-Oxime

CAS Registry Number: 37961-71-0

Molecular Formula: C₉H₁₂N₂O

Molecular Weight: 164.207

Accurate Mass: 164.094963

Percentage Composition: C 65.83%; H 7.37%; N 17.06%; O 9.74%

Physical Description: Cryst.

Melting Point: Mp 144°

>>Derivative: (Z)-Oxime

CAS Registry Number: 77145-76-7

Physical Description: Cryst.

Melting Point: Mp 185 dec.°

>>Derivative: 4-Nitrophenylhydrazone

Melting Point: Mp 182°

>>Derivative: Thiosemicarbazone

Type of Compound Code(s): PA3150 PM7120

Molecular Formula: C₁₀H₁₄N₄S

Molecular Weight: 222.313

Accurate Mass: 222.093916

Percentage Composition: C 54.03%; H 6.35%; N 25.20%; S 14.42%

Use/Importance: Reagent for detn. of Pd(II)

Physical Description: Cryst. (MeOH aq.)

Melting Point: Mp 208°

References: