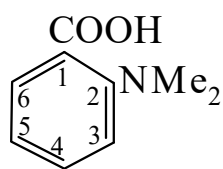




>>Entry Name: 2-(Dimethylamino)benzoic acid, 9CI

Synonym(s): *N,N*-Dimethylantranilic acid



CAS Registry Number: 610-16-2

Related CAS Registry Numbers(s): 20925-24-0 64109-38-2

Molecular Formula: C₉H₁₁NO₂

Molecular Weight: 165.191

Accurate Mass: 165.078979

Percentage Composition: C 65.44%; H 6.71%; N 8.48%; O 19.37%

Physical Description: Cryst. (Et₂O)

Melting Point: Mp 72°

pKa Value: pK_{a1} 1.4; pK_{a2} 8.49 (25°)

>>Derivative: Hydrochloride

Physical Description: Cryst.

Melting Point: Mp 192-193 dec.°

>>Derivative: Me ester

CAS Registry Number: 10072-05-6

Molecular Formula: C₁₀H₁₃NO₂

Molecular Weight: 179.218

Accurate Mass: 179.094629

Percentage Composition: C 67.02%; H 7.31%; N 7.82%; O 17.85%

Physical Description: Oil

Boiling Point: Bp_{11.5} 130-131°

>>Derivative: Amide

CAS Registry Number: 56042-77-4

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. (EtOH)

Melting Point: Mp 140°

>>Derivative: Hydrazide

Synonym(s): 2-(Dimethylamino)benzoic acid hydrazide, 9CI. Dmayl hydrazide

CAS Registry Number: 86601-75-4

Type of Compound Code(s): PS8250 PM6730

Molecular Formula: C₉H₁₃N₃O

Molecular Weight: 179.221

Accurate Mass: 179.105862

Percentage Composition: C 60.32%; H 7.31%; N 23.45%; O 8.93%

Use/Importance: Fluorescent reagent for hplc anal. of carbonyl compds.

Rare Chemicals Library: S53948-1

References:

Willstätter, R. *et al.*, *Ber.*, 1904, **37**, 406; 409, (*synth*)

Edsall, J.T. *et al.*, *J.A.C.S.*, 1935, **57**, 1965, (*synth*)

Dhaneshevar, N.N. *et al.*, *Acta Cryst. B*, 1973, **29**, 2980, (*struct*)

Rao, K.R.K. *et al.*, *J. Mol. Struct.*, 1973, **18**, 447, (*synth*)

Anderson, J.M., *Anal. Biochem.*, 1986, **152**, 146, (*hydrazide*)