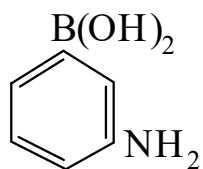




>>Entry Name: (3-Aminophenyl)dihydroxyborane

Synonym(s): 3-Aminophenylboronic acid, 12Cl, 9Cl. *m*-Aminophenylboric acid. 3-Aminobenzeneboronic acid



CAS Registry Number: 30418-59-8

Molecular Formula: C₆H₈BNO₂

Molecular Weight: 136.946

Accurate Mass: 137.064809

Percentage Composition: C 52.62%; H 5.89%; B 7.89%; N 10.23%; O 23.37%

Source/Synthesis: Synth. from *m*-NO₂C₆H₄B(OH)₂ in MeOH aq. + PtO₂ + H₂ (2-3 atm.)

Use/Importance: Used in affinity chromatog. of biologically important molecules

Physical Description: Hexagonal plates (H₂O)

Melting Point: Mp 176°

Solubility: Sol. H₂O, EtOH; spar. sol. Et₂O

pKa Value: pK_{a1} 4.47; pK_{a2} 8.81 (25°,H₂O)

Sigma: A1630

>>Derivative: Sulfate (2:1)

CAS Registry Number: 66472-86-4

Molecular Formula: C₁₂H₁₈B₂N₂O₈S

Molecular Weight: 371.971

Percentage Composition: C 38.75%; H 4.88%; B 5.81%; N 7.53%; O 34.41%; S 8.62%

Source/Synthesis: Synth. as above with addn. of H₂SO₄ to the filtrate

Use/Importance: Commercially available

Physical Description: Cryst. (MeOH)

Aldrich: A7175-1

Fluka: 9198

Sigma: A3383

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1136C, (*ir*)

Aldrich Library of NMR Spectra, 2nd edn., 1983, **2**, 1015B, (*nmr*)

Seaman, W. *et al.*, *J.A.C.S.*, 1931, **53**, 711, (*synth*)

Bean, F.R. *et al.*, *J.A.C.S.*, 1932, **54**, 4415, (*synth, props*)

Singhal, R.P. *et al.*, *Anal. Biochem.*, 1980, **109**, 1, (*use*)

Wielckens, K. *et al.*, *Eur. J. Biochem.*, 1981, **117**, 69, (*use*)

Ger. Pat., 1981, 2 933 832; *CA*, **94**, 205033a, (*use*)