



>>Entry Name: Dihydroxyisobutylborane

Synonym(s): (2-Methylpropyl)boronic acid, 12Cl, 9Cl. 2-Methylpropaneboronic acid, 8Cl. Isobutylboronic acid

CAS Registry Number: 84110-40-7

$(\text{H}_3\text{C})_2\text{CHCH}_2\text{B}(\text{OH})_2$

Molecular Formula: $\text{C}_4\text{H}_{11}\text{BO}_2$

Molecular Weight: 101.941

Accurate Mass: 102.08521

Percentage Composition: C 47.13%; H 10.88%; B 10.61%; O 31.39%

Use/Importance: Stimulates root elongation in wheat

Physical Description: Colourless cryst. (H_2O)

Melting Point: Mp 112-113° (103-105°)

Solubility: Sol. common org. solvs., hot H_2O

Aldrich: 34622-5

References:

Krause, E. *et al.*, *Ber.*, 1921, **54**, 2784, (*synth*)

Snyder, H.R. *et al.*, *J.A.C.S.*, 1938, **60**, 105, (*synth*)

Hurd, D.T., *J.A.C.S.*, 1948, **70**, 2053, (*synth*)

Letsinger, R.L. *et al.*, *J.O.C.*, 1953, **18**, 895, (*synth*)

Torssell, K., *Physiol. Plant.*, 1963, **16**, 92, (*pharmacol*)

Lambros, A. *et al.*, *THEOCHEM*, 1984, **18**, 61, (*theory*)