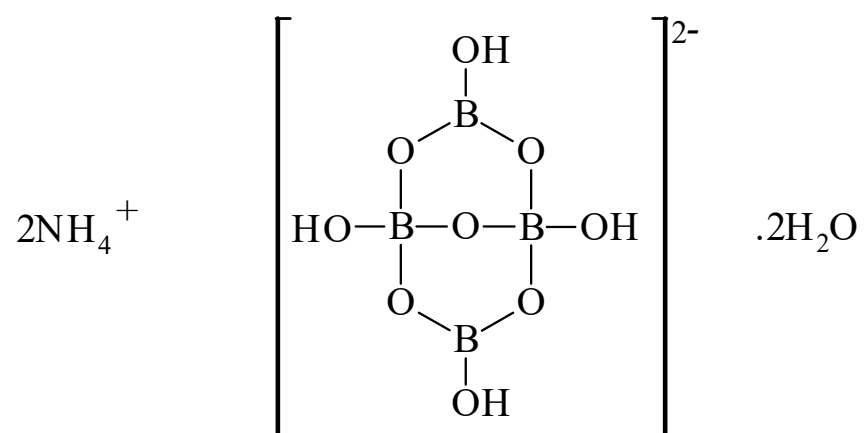




>>Entry Name: Diammonium tetraborate tetrahydrate



CAS Registry Number: 10135-84-9

Molecular Formula: $\text{B}_4\text{H}_{16}\text{N}_2\text{O}_{11}$

Molecular Weight: 263.377

Accurate Mass: 264.112633

Percentage Composition: B 16.42%; H 6.12%; N 10.64%; O 66.82%

Use/Importance: Used as borate source when alkali metal ions are specifically not required. Used in manuf. of urea-formaldehyde foams, fire retardants and in electrochemistry

Physical Description: Colourless cryst; quite unstable at r.t. - evolves NH_3

Solubility: Sol. H_2O

References:

Tolédano, P. *et al.*, *Bull. Soc. Chim. Fr.*, 1966, 1933; 1969, 1462, (*synth*)

Janda, R. *et al.*, *Z. Naturforsch., B*, 1979, **34**, 1078, (*B-11 nmr*)

Janda, R. *et al.*, *Spectrochim. Acta A*, 1980, **36**, 997, (*ir, Raman*)

Janda, R. *et al.*, *Z. Kristallogr.*, 1981, **154**, 1, (*cryst struct*)