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22 Date of Revision

4 May 2017.

Boric Acid

1 Nonproprietary Names

BP: Boric Acid

JP: Boric Acid

PhEur: Boric Acid

USP–NF: Boric Acid

2 Synonyms

Acidum boricum; boracic acid; boraic acid; *Borofax*; boron trihydroxide; E284; orthoboric acid; trihydroxyborene.

3 Chemical Name and CAS Registry Number

Orthoboric acid [10043-35-3]

Metaboric acid [13460-50-9]

4 Empirical Formula and Molecular Weight

HBO₂ 43.82 (for monohydrate)

H₃BO₃ 61.83 (for trihydrate)

5 Structural Formula

See Section 4.

6 Functional Category

Antimicrobial preservative; buffering agent.

7 Applications in Pharmaceutical Formulation or Technology

Boric acid is used as an antimicrobial preservative⁽¹⁾ in eye drops, cosmetic products, ointments, and topical creams. It is also used as an antimicrobial preservative in foods.