

CERTIFICATE OF ANALYSIS

CAS 10332-33-9 Sodium Perborate Monohydrate

Sodium perborate (PBS) is a white, odorless, water-soluble chemical compound with the chemical formula NaBO₃. It crystallizes as the monohydrate, NaBO₃·H₂O, trihydrate, NaBO₃·3H₂O and tetrahydrate, NaBO₃·4H₂O. The monohydrate and tetrahydrate are the commercially important forms. The elementary structural unit of sodium perborates is a dimer anion B₂O₄(OH)₄²⁻, in which two boron atoms are joined by two peroxy bridges in a chair-shaped 6-membered ring, and the simplistic NaBO₃·nH₂O-type formulas are just a convenient way to express the average chemical composition.

Basic Info

Chemical Name	Sodium perborate monohydrate
Synonyms	sodium, oxidoxy (oxo) borane, hydrate;
CAS No.	10332-33-9
Molecular Formula	BH ₂ NaO ₄
Molecular Weight	99.81430
PSA	57.35000
LogP	-0.70070

Properties

Appearance & Physical State	White crystalline powder
Density	1.174 g/mL at 25 ° C(lit.)
Boiling Point	202–204 ° C(lit.)
Melting Point	7–9 ° C(lit.)
Flash Point	>230 ° F
Refractive Index	n _{20/D} 1.417(lit.)