



>>Entry Name: Sodium bromide (NaBr), 8CI

CAS Registry Number: 7647-15-6

NaBr

Molecular Formula: BrNa

Molecular Weight: 102.894

Accurate Mass: 101.928103

Percentage Composition: Br 77.66%; Na 22.34%

Source/Synthesis: Synth. by neutralisation of NaOH or Na₂CO₃ with aq. HBr initially as dihydrate

Use/Importance: Commercially available

Biological Use/Importance: Sedoneural, anticonvulsant agent

Physical Description: Hygroscopic colourless cubic cryst.

Melting Point: Mp 747°

Boiling Point: Bp 1390°

Solubility: V. sol. H₂O (116 g per 100 cm³ at 50°; 121 g per 100 cm³ at 100°)

Other Data: ΔH_f° -361.4 kJ mol⁻¹; ΔG_f° -349.3 kJ mol⁻¹; S° 86.8 JK⁻¹ mol⁻¹

Hazard & Toxicity: Irritant

Aldrich: 46059-1

Fluka: 71329

Sigma: S4547

>>Derivative: Dihydrate

CAS Registry Number: 13466-08-5

Molecular Formula: BrH₄NaO₂

Molecular Weight: 138.924

Percentage Composition: Br 57.52%; H 2.90%; Na 16.55%; O 23.03%

Source/Synthesis: Cryst. from aq. solns. of NaBr

Physical Description: Colourless monoclinic cryst. Dec. on heating with H₂O loss (-2H₂O at 51°)

Solubility: V. sol. H₂O (79 g per 100 cm³ at 25°)

Other Data: ΔH_f° -952 kJ mol⁻¹; ΔG_f° -828 kJ mol⁻¹; S° 179 JK⁻¹ mol⁻¹

References:

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