



>>Entry Name: Rubidium bromide (RbBr), 8CI

CAS Registry Number: 7789-39-1

RbBr

Molecular Formula: BrRb

Molecular Weight: 165.372

Accurate Mass: 163.85013

Percentage Composition: Br 48.32%; Rb 51.68%

Source/Synthesis: Prepd. by slow neutralisation of Rb₂CO₃ with HBr in aq. soln. Alternatively, reaction of Rb₂CO₃ with Br₂ in aq. soln. containing N₂H₄.H₂O affords pure RbBr

Use/Importance: Commercially available

Physical Description: Colourless cubic cryst.

Melting Point: Mp 693°

Boiling Point: Bp 1340°

Solubility: V. sol. H₂O (98 g per 100 cm³ at 5°; 205 g per 100 cm³ at 114°); spar. sol. Me₂CO; insol. EtOH

Other Data: ΔH_f° -395 kJ mol⁻¹; ΔG_f° -382 kJ mol⁻¹; S° 110 J K⁻¹ mol⁻¹

Aldrich: 22866-4

Fluka: 83960

Sigma: R2377

References:

Gmelin Handbook Inorg. Chem., Syst. No. 24, 1955, 162, (rev, bibl)

Deshpande, V.T. *et al.*, *Acta Cryst.*, 1961, **14**, 353, (*cryst struct*)

Vulich, A.I. *et al.*, *CA*, 1969, **70**, 53444, (*synth*)