



>>Entry Name: Rubidium fluoride (RbF), 8Cl

CAS Registry Number: 13446-74-7

RbF

Molecular Formula: FRb

Molecular Weight: 104.466

Accurate Mass: 103.910197

Percentage Composition: F 18.19%; Rb 81.81%

Source/Synthesis: Prepd. by reaction of Rb₂CO₃ with HF in a Pt vessel

Physical Description: Hygroscopic colourless cubic cryst.

Melting Point: Mp 795°

Boiling Point: Bp 1410°

Solubility: V. sol. H₂O (131 g per 100 cm³ at 18°); insol. EtOH, Et₂O

Other Data: ΔH_f° -558 kJ mol⁻¹; ΔG_f° -523 kJ mol⁻¹; S° 82 J K⁻¹ mol⁻¹

Hazard & Toxicity: Irritant

Aldrich: 25142-9

Sigma: R1002

References:

Sigma-Aldrich Library of Chemical Safety Data, **2**, 3057A

Gmelin Handbook Inorg. Chem., Syst. No. 24, 1955, 125, (rev, bibl)

Donnay, J.D.H. *et al.*, *Crystal Data, Determinative Tables*, US Dept. of Commerce/NBS/JCPDS, Washington USA, 3rd Ed., 1973, **2**, C121

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, RPP000