



>>Entry Name: Potassium iodide, 8CI, JAN, USAN
ENTRY UNDER REVIEW

CAS Registry Number: 7681-11-0

KI

Molecular Formula: IK

Molecular Weight: 166.003

Accurate Mass: 165.86818

Percentage Composition: I 76.45%; K 23.55%

Source/Synthesis: Synth. by neutralisation of K_2CO_3 (or KOH) with aq. HI followed by recryst.

Use/Importance: Commercially available. Used for the spectroscopic, gravimetric and potentiometric determination of various elements. General purpose catalyst, widely used in photographic processing solns. Antifungal, expectorant, iodine supplement

Physical Description: Colourless cubic cryst.

Melting Point: Mp 681°. Mp 723°

Boiling Point: Bp 1330°

Solubility: V. sol. H_2O (128 g per 100 cm^3 at 0°, 208 g per 100 cm^3 at 100°); mod. sol. EtOH (1.9 g per 100 cm^3 at 25°), Me_2CO (1.3 g per 100 cm^3 at 25°); spar. sol. Et_2O

Other Data: $\Delta H_f -327.9 \text{ kJ mol}^{-1}$; $\Delta G_f -323.0 \text{ kJ mol}^{-1}$; $S^\circ 106.4 \text{ J K}^{-1} \text{ mol}^{-1}$. Component of Elixophyllin -KI and Quadrinal

Hazard & Toxicity: Human teratogen

Aldrich: 42942-2

Fluka: 60421

Sigma: P8256

Supelco: R40-0150

References:

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