>>**Entry Name: Potassium nitrite (KNO_2)**
ENTRY UNDER REVIEW
Synonym(s): Nitrous acid potassium salt, 8Cl

CAS Registry Number: 7758-09-0

KNO_2

Molecular Formula: KNO_2
Molecular Weight: 85.104
Accurate Mass: 84.956611
Percentage Composition: K 45.94%; N 16.46%; O 37.60%
Source/Synthesis: Synth. either by metathesis of $NaNO_2$ and KCl, or by thermal dec. of KNO_3, or by reaction of NO with KOH
Use/Importance: Commercially available. Used in explosives; corrosion inhibitor for steels
Biological Use/Importance: Vasodilator and antidote for cyanide poisoning
Physical Description: Pale yellow hexagonal cryst.; deliquescent. Undergoes rhombohedral to cubic transition at 70°. Disproportionates on heating in the absence of air forming KNO_3 and K_2O and evolving N_2
Melting Point: Mp 440°
Solubility: V. sol. H_2O (281 g per 100 cm^3 at 0°; 413 g per 100 cm^3 at 100°)
Other Data: ΔH_f° –370 kJ mol^{-1}; ΔG_f° –307 kJ mol^{-1}; S° 152 J K^{-1} mol^{-1}
Hazard & Toxicity: Oxidiser, toxic

Aldrich: 31048-4
Fluka: 60417
Sigma: P7391
Supelco: R47-5040

References:

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