



>>Entry Name: Cobalt(II) oxide (CoO), 8CI

Synonym(s): Cobaltous oxide. Cobalt monoxide. C.I. 77322. C.I. Pigment black 13

CAS Registry Number: 1307-96-6

Related CAS Registry Numbers(s): 11104-61-3 23396-76-1 57627-73-3 72255-44-8 81326-12-7

CoO

Molecular Formula: CoO

Molecular Weight: 74.933

Accurate Mass: 74.928113

Percentage Composition: Co 78.65%; O 21.35%

General Statement: NaCl struct.

Source/Synthesis: Synth. by heating Co in air or steam or by heating the hydroxide, carbonate or nitrate in the absence of air

Use/Importance: Commercially available. Pigment for ceramics and glasses; catalyst; potential use in dynamic, electrically controlled optical device

Physical Description: Olive green solid; the colour of anhydrous CoO depends upon the degree of dispersion. It may be yellow, grey, brown, reddish, bluish or black

Melting Point: Mp 1935°

Solubility: Insol. H₂O, EtOH; sol. acid, [NH₄]OH

Other Data: Readily absorbs O₂ even at r.t., converts to Co₃O₄ at 600-700°. Non-stoichiometric

Aldrich: 34315-3

>>Derivative: Hydrate

CAS Registry Number: 12262-94-1

References:

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