



>>Entry Name: Lead chromate(VI) (PbCrO₄)

Synonym(s): Chromate(VI) lead(2+) (1:1). Plumbous chromate. CI Pigment yellow 34. Chromic acid (H₂CrO₄), lead (2+) salt, 9CI

CAS Registry Number: 7758-97-6

Related CAS Registry Numbers(s): 1344-37-2

PbCrO₄

Molecular Formula: CrO₄Pb

Molecular Weight: 323.194

Accurate Mass: 323.896796

Percentage Composition: Cr 16.09%; O 19.80%; Pb 64.11%

Source/Synthesis: Synth. from Pb(NO₃)₂ + K₂CrO₄

Use/Importance: Commercially available. Vast patent literature. V. important pigment. Major component of lead chromate pigments- *Medium Chrome Yellow*, *Lemon Chrome Yellow*, *Molybdate Orange*, and *Orange Chrome*. Used in pyrotechnic delay mixts.

Physical Description: Stable orange-yellow monoclinic cryst.; unstable yellow orthorhombic form, and orange-red tetragonal form. (Stable above 783°)

Melting Point: Mp 844°

Solubility: Sl. sol. acid solns. Insol. AcOH; prac. insol. H₂O

Other Data: Occurs naturally as mineral

Hazard & Toxicity: Toxic by ingestion, carcinogenic

Aldrich: 43443-4

Fluka: 15327

Sigma: L7156

>>Variant: Mineral-form

Synonym(s): Crocoite

CAS Registry Number: 14654-05-8

Molecular Formula: CrO₄Pb

Molecular Weight: 323.194

Accurate Mass: 323.896796

Percentage Composition: Cr 16.09%; O 19.80%; Pb 64.11%

Source/Synthesis: Occurs as a secondary mineral in Cr and Pb containing ores. Found in USA, Tasmania, USSR, Romania, Zimbabwe and the Philippines

Physical Description: Slender monoclinic, brilliant red-orange prismatic cryst.

References:

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