



>>Entry Name: Barium chromate(VI) (BaCrO₄)

Synonym(s): CI Pigment yellow 31. Lemon yellow. Ultramarine yellow. Permanent yellow. CI 77103. Chromate(VI) barium salt (1:1)

CAS Registry Number: 10294-40-3

BaCrO₄

Molecular Formula: BaCrO₄

Molecular Weight: 253.321

Accurate Mass: 253.825401

Percentage Composition: Ba 54.21%; Cr 20.53%; O 25.26%

General Statement: Known since 1809

Source/Synthesis: Manuf. from BaCl₂ and Na₂CrO₄. Synth. from e.g. chromic acid and Ba(OH)₂

Use/Importance: Used in pyrotechnics and high temp. batteries. Pigment for artists' paints, glass, porcelain. Anticorrosive

Physical Description: V. pale yellow cryst. Darkens on heating

Melting Point: Mp 1400 dec.°

Solubility: Sol. strong acids; insol. org. solvs.

Aldrich: 40105-6

Fluka: 11763

Sigma: B6010

References:

Mellor Compr. Treat. Inorg. Theor. Chem., 1931, **11**, 271, (bibl)

Gmelin Handbook Inorg. Chem., Syst. No. 52, 1962, 835, (rev, bibl)

Allen, G.C. et al., J.C.S. Dalton, 1973, 1675, (pe)

Lentz, A. et al., Cryst. Res. Technol., 1986, **21**, 827, (cryst struct)

Lewis, R.J., Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold, 1992, BAK250