



>>Entry Name: Ammonium chromate(VI) ((NH₄)₂CrO₄)

Synonym(s): Diammonium chromate

CAS Registry Number: 7788-98-9

(NH₄)₂CrO₄

Molecular Formula: CrH₈N₂O₄

Molecular Weight: 152.07

Accurate Mass: 151.988917

Percentage Composition: Cr 34.19%; H 5.30%; N 18.42%; O 42.08%

Use/Importance: Used in flexible printing, photosensitisation, as wood preservative, as analytical reagent

Physical Description: Monoclinic, golden yellow needles. Partially reverts to the dichromate on standing

Solubility: Mod. sol. H₂O; spar. sol. NH₃, Me₂CO

Other Data: Weakly paramagnetic. Dec. above 100°. See also Ammonium dichromate(VI) ((NH₄)₂Cr₂O₇) [HWZ15-X](#). ΔH_f° (per (NH₄)₂CrO₄) -1166 kJ mol⁻¹

Aldrich: 21603-8

Fluka: 9707

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1290B, (*ir*)

Mellor Compr. Treat. Inorg. Theor. Chem., 1931, **11**, 241, (*bibl*)

Gmelin Handbook Inorg. Chem., Syst. No. 52, 1962, 707, (*synth, props*)

Gatehouse, B.M. *et al.*, *J.C.S.(A)*, 1969, 1857, (*cryst struct*)

Stephens, J.S. *et al.*, *Acta Cryst. B*, 1970, **26**, 437, (*cryst struct*)

Singhal, O.P., *Z. Naturforsch., B*, 1973, **28**, 23, (*magnetism*)