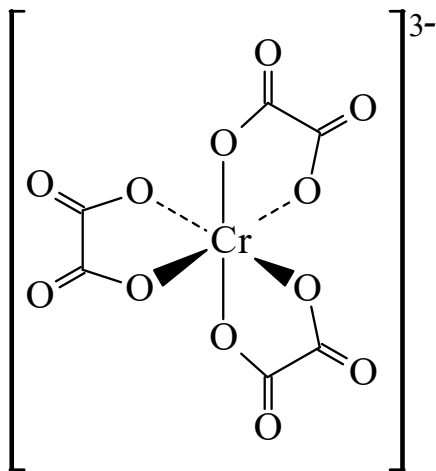




>>Entry Name: **Tris(oxalato)chromate(III)(3-)**

Synonym(s): Tris[ethanedioato(2-)-O,O']chromate(III)(3-), 10Cl



CAS Registry Number: 15054-01-0

Related CAS Registry Numbers(s): 15275-09-9

Molecular Formula: $\text{C}_6\text{CrO}_{12}^{3(-)}$

Molecular Weight: 316.055

Accurate Mass: 315.879489

Percentage Composition: C 22.80%; Cr 16.45%; O 60.75%

>>Derivative: Tri-K salt

Synonym(s): Chromic potassium oxalate

CAS Registry Number: 14217-01-7

Molecular Formula: $\text{C}_6\text{CrK}_3\text{O}_{12}$

Molecular Weight: 433.35

Percentage Composition: C 16.63%; Cr 12.00%; K 27.07%; O 44.30%

Solubility: V. sol. H_2O ; insol. EtOH

>>Derivative: Tri-K salt, trihydrate

CAS Registry Number: 15275-09-9

Physical Description: Dichroic cryst.: green blue by transmitted light, magenta by reflection

Aldrich: 31100-6

>>Derivative: Tri- NH_4 salt

Physical Description: Dark blue plates +2 H_2O

>>Derivative: Tetrakis[bis(ethylenedithio)tetrathiafulvalene] salt

Source/Synthesis: Synth. electrochemically from the NH_4 salt + bedt-ttf in wet PhCN

Physical Description: Black needles + H_2O + PhCN

Other Data: Superconductor below 60K

References:

- Van Niekerk, J.N. *et al.*, *Acta Cryst.*, 1952, **5**, 499, (*cryst struct, NH_4 salt*)
Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **3**, 1514, (*synth*)
Taylor, D., *Aust. J. Chem.*, 1978, **31**, 1455, (*cryst struct, K salt*)
Inorg. Synth., 1979, **19**, 127, (*synth*)
Otsuka, T. *et al.*, *Bull. Chem. Soc. Jpn.*, 1992, **65**, 3378, (*luminescence spectra*)
Martin, L. *et al.*, *Chem. Comm.*, 1997, 1367-1368, (*fulvalene salt*)