>>**Entry Name: Chromium copper oxide (Cr_2CuO_4)**
Synonym(s): Copper(*II*) chromate(*III*). Copper chromite. Cupric chromite

CAS Registry Number: 12018-10-9

$CuCr_2O_4$

Molecular Formula: Cr_2CuO_4
Molecular Weight: 231.536
Accurate Mass: 230.800276
Percentage Composition: Cr 44.91%; Cu 27.45%; O 27.64%
General Statement: Spinel, Cr(*III*) exists in a tetrahedral environment
Source/Synthesis: Synth. from CuO and Cr_2O_3 heated at 867° for 21 h, then in O_2 at 997° for 6 h
Use/Importance: Catalyst for oxidation of hydrocarbons
Physical Description: Cryst.
Solubility: Insol. H_2O
Other Data: Ferrimagnetic; T_N 125.5K. Reduced at 700° to $Cu_2Cr_2O_4$

References:

Gillot, B.*, Bull. Soc. Chim. Fr.*, 1968, 2382, *(use)*
Kohlmuller, R. *et al.*, *Bull. Soc. Chim. Fr.*, 1968, 4383, *(synth, struct, magnetism)*
Inami, S.H. *et al.*, *J. Catal.*, 1970, **18**, 343, *(use)*
Lenglet, M. *et al.*, *J. Solid State Chem.*, 1983, **50**, 294, *(nd)*