



>>Entry Name: Tetrachlororuthenate(II)(2-), 8Cl

CAS Registry Number: 23319-04-2

[RuCl₄]²⁽⁻⁾

Molecular Formula: Cl₄Ru²⁽⁻⁾

Molecular Weight: 242.881

Accurate Mass: 241.779756

Percentage Composition: Cl 58.39%; Ru 41.61%

Source/Synthesis: Prepared by the chemical or electrochemical redn. of a soln. of RuCl₃.xH₂O in 6M HCl

Physical Description: Suggested as a dominant species in blue soln., from which green diamagnetic salts can be isolated

Solubility: Sol. 6M HCl

>>Derivative: 1,2-Ethylenediammonium(2+) salt

Molecular Formula: C₂H₁₀Cl₄N₂Ru

Molecular Weight: 304.995

Percentage Composition: C 7.88%; H 3.30%; Cl 46.50%; N 9.18%; Ru 33.14%

Physical Description: Blue-green solid

>>Derivative: Bis-pyridinium salt

Physical Description: Green solid

>>Derivative: 2,2'-Bipyridinium(2+) salt

Physical Description: Green solid

References:

Godward, L.W.N. *et al.*, *J.C.S.*, 1938, 1422, (*synth*)

J}orgensen, C.K., *Acta Chem. Scand.*, 1956, **10**, 518, (*synth, uv*)

Rechnitz, G.A., *Inorg. Chem.*, 1962, **1**, 953, (*synth*)

Seddon, E.A. *et al.*, *The Chemistry of Ruthenium*, Elsevier, Amsterdam, 1984, 342, (*rev*)