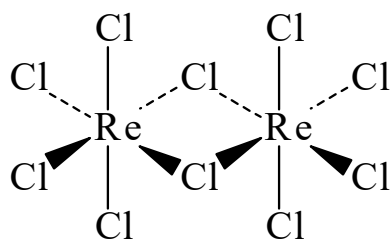




>>Entry Name: Rhenium(V) chloride (ReCl₅)

Synonym(s): Rhenium pentachloride



dimer (solid state struct.)

CAS Registry Number: 13596-35-5

Molecular Formula: Cl₅Re

Molecular Weight: 363.471

Accurate Mass: 361.800004

Percentage Composition: Cl 48.77%; Re 51.23%

_{br} 246.5 pm

Source/Synthesis: Synth. (i) from Re and Cl₂, (ii) from Re₂O₇ and CCl₄

Physical Description: Black reactive cryst. which fume in air

Melting Point: Mp 261 dec.°

Aldrich: 30919-2

>>Derivative: Dimer

Synonym(s): Di-μ-chlorooctachlorodirhenium(V)

Molecular Formula: Cl₁₀Re₂

Molecular Weight: 726.941

Accurate Mass: 723.600008

Percentage Composition: Cl 48.77%; Re 51.23%

References:

Inorg. Synth., 1963, **7**, 163; 1980, **20**, 41, (*synth*)

Mucker, K. *et al.*, *Acta Cryst. B*, 1968, **24**, 874, (*cryst struct*)

Guest, A. *et al.*, *Can. J. Chem.*, 1971, **49**, 603

Rouschias, G., *Chem. Rev.*, 1974, **74**, 531, (*props, rev, bibl*)