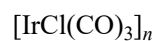




>>Entry Name: Tricarbonylchloroiridium, 12Cl, 11Cl

CAS Registry Number: 32594-40-4

Related CAS Registry Numbers(s): 28700-98-3



Molecular Formula: C_3ClIrO_3

Molecular Weight: 311.704

Accurate Mass: 311.916514

Percentage Composition: C 11.56%; Cl 11.37%; Ir 61.67%; O 15.40%

Source/Synthesis: Synth. from IrCl_3 adsorbed onto SiO_2 + CO at 180° for 3h, or from $\text{Ir}(\text{CO})_2\text{Cl}_2$ + CO in toluene for 24h, or from $\text{IrCl}_3 \cdot n\text{H}_2\text{O}$ adsorbed onto SiO_2 at 150° under CO (1 atm) for 24h

Use/Importance: Useful starting material for iridium chlorocarbonyl complexes; catalyst for the water gas shift reaction (WGSR) and for isom. of strained ring compds.; catalyses carbonylation of alcohols, $\text{MeOH} \rightarrow \text{AcOH}$

Physical Description: Highly conducting brown-violet needles with metallic lustre

Other Data: Subl. in CO

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Farone, F. *et al.*, *J.C.S. Dalton*, 1973, 1625, (*use*)

Aderjan, R. *et al.*, *Z. Naturforsch., A*, 1974, **29**, 1367, (*uv*)

Dahl, L.F. *et al.*, *Prog. Inorg. Chem.*, 1976, **20**, 1, (*ms*)

Reis, A.H. *et al.*, *J.A.C.S.*, 1977, **99**, 4184, (*synth, cryst struct, bibl*)

Ford, P.C. *et al.*, *Adv. Chem. Ser.*, 1979, **173**, 81, (*use*)

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