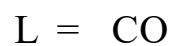
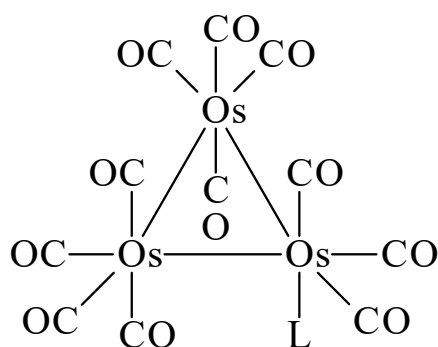




>>Entry Name: Dodecacarbonyltriosmium, 9CI

Synonym(s): Osmium carbonyl ( $\text{Os}_3(\text{CO})_{12}$ ). Triosmium dodecacarbonyl



CAS Registry Number: 15696-40-9

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

Molecular Weight: 906.725

Accurate Mass: 911.823381

Percentage Composition: C 15.90%; O 21.17%; Os 62.93%

Source/Synthesis: Synth. from  $\text{OsO}_4$ , MeOH at CO and  $125^\circ$  for 12 h or by heating  $\alpha\text{-}[\text{Os}(\text{CO})_3\text{Cl}_2]_2$  (grafted on to the surface of  $\text{SiO}_2$  in the presence of  $\text{Na}_2\text{CO}_3$  and  $\text{CH}_2\text{Cl}_2$ ) and CO at  $200^\circ$  for 3d

Physical Description: Yellow cryst. ( $\text{C}_6\text{H}_6$  or  $\text{CHCl}_3$  or by subl.)

Melting Point: Mp  $224^\circ$

Boiling Point: Subl.<sub>0.01</sub>  $130^\circ$

Solubility: Shows limited soly. in org. solvs.

Other Data: Ir  $\nu_{\text{CO}}$  2070, 2036, 2015, 2003  $\text{cm}^{-1}$

Aldrich: 24974-2

Fluka: 75615

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