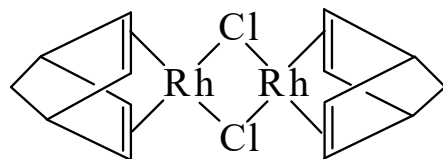




>>Entry Name: Bis[(2,3,5,6-η)-bicyclo[2.2.1]hepta-2,5-diene]di-μ-chlorodirhodium, 12Cl, 11Cl, 10Cl, 9Cl

Synonym(s): Di-μ-chlorobis(2,5-norbornadiene)dirhodium, 8Cl. Bis(norbornadiene-μ-chlororhodium)



CAS Registry Number: 12257-42-0

Molecular Formula: C₁₄H₁₆Cl₂Rh₂

Molecular Weight: 460.997

Accurate Mass: 459.873904

Percentage Composition: C 36.48%; H 3.50%; Cl 15.38%; Rh 44.64%

Source/Synthesis: Synth. from RhCl₃·xH₂O + nbd in EtOH aq. (5:1) either in a microwave oven for 35s, at 50° for 6h or at 25° for 2d

Use/Importance: Useful precursor to rhodium hydrogenation catalysts. With added phosphine, catalyst for ketone redn. Catalyst precursor (with PPh₃) for alkene hydroformylation. Catalyses reaction of aminoarenes with aldehydes to give quinolines. Catalyses isom. of strained ring compds., e.g. quadricyclane; also polym. of butadiene

Physical Description: Yellow cryst. (CH₂Cl₂/MeOH)

Melting Point: Mp 240 dec.°

Aldrich: 24993-9

Fluka: 14350

>>Derivative: Inclusion compd. with β-cyclodextrin (2:1)

CAS Registry Number: 107097-77-8

Molecular Formula: C₉₈H₁₆₄Cl₂O₇₂Rh₂

Molecular Weight: 2771.047

Percentage Composition: C 42.48%; H 5.97%; Cl 2.56%; O 41.57%; Rh 7.43%

Source/Synthesis: Synth. from [Rh(nbd)Cl]₂ + saturated aq. β-cyclodextrin at 40°

Physical Description: Air-stable pale yellow cryst. (H₂O)

Melting Point: Mp 260-263 dec.°

Solubility: Sol. H₂O, HOCH₂CH₂OH, DMSO, DMF

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