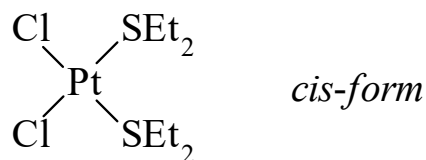




>>Entry Name: Dichlorobis(diethyl sulfide)platinum(II)

ENTRY UNDER REVIEW

Synonym(s): Dichlorobis(ethyl sulfide)platinum, 8Cl. Dichlorobis[1,1'-thiobis(ethane)]platinum, 9Cl. Bis(diethyl sulfide)dichloroplatinum



CAS Registry Number: 14873-92-8

Molecular Formula: C₈H₂₀Cl₂PtS₂

Molecular Weight: 446.363

Accurate Mass: 445.00311

Percentage Composition: C 21.53%; H 4.52%; Cl 15.89%; Pt 43.70%; S 14.37%

Source/Synthesis: Synth. from PtCl₂ or K₂PtCl₄ + SEt₂; use of excess SEt₂ gives *cis*-isomer

Use/Importance: Synth. use by substitution of Cl. Catalyses crosslinking of siloxanes. Vulcanisation accelerator

Other Data: Configuration inversion at S has been studied

>>Variant: *cis*-form

CAS Registry Number: 15442-57-6

Molecular Formula: C₈H₂₀Cl₂PtS₂

Molecular Weight: 446.363

Accurate Mass: 445.00311

Percentage Composition: C 21.53%; H 4.52%; Cl 15.89%; Pt 43.70%; S 14.37%

General Statement: Less sol. form

Physical Description: Pale green-yellow flakes (Me₂CO/petrol)

Melting Point: Mp 107-108°

Solubility: Sol. polar org. solvs.; insol. hydrocarbons

Other Data: Dec. at 300° to give PtS. Dipole moment 9.5μD

Aldrich: 43284-9

>>Variant: *trans*-form

CAS Registry Number: 15337-84-5

Molecular Formula: C₈H₂₀Cl₂PtS₂

Molecular Weight: 446.363

Accurate Mass: 445.00311

Percentage Composition: C 21.53%; H 4.52%; Cl 15.89%; Pt 43.70%; S 14.37%

General Statement: More sol. form

Physical Description: Bright yellow needles (EtOH aq.)

Melting Point: Mp 107-108° (93-100°)

Solubility: Sol. org. solvs. including hydrocarbons

Other Data: Dec. at 200°. Dipole moment 2.4μD

References:

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