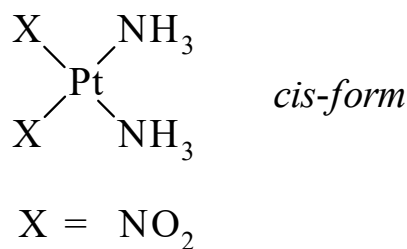




>>Entry Name: **Diamminedinitroplatinum(II)**

Synonym(s): Diamminebis(nitrito)platinum(II), 9Cl. Diamminedinitroplatinum(II), 8Cl



CAS Registry Number: 14286-02-3

Related CAS Registry Numbers(s): 63718-03-6

Molecular Formula: H₆N₄O₄Pt

Molecular Weight: 321.152

Accurate Mass: 321.003672

Percentage Composition: H 1.88%; N 17.45%; O 19.93%; Pt 60.74%

General Statement: Square planar. Alleged *O*-coordination isomer dubious. Despite its antiquity this compd. has received few modern studies

Use/Importance: Usual source of Pt in plating solns.

Aldrich: 33988-1

>>Variant: *cis*-form

CAS Registry Number: 14409-61-1

Molecular Formula: H₆N₄O₄Pt

Molecular Weight: 321.152

Accurate Mass: 321.003672

Percentage Composition: H 1.88%; N 17.45%; O 19.93%; Pt 60.74%

General Statement: Config. not confirmed

Source/Synthesis: Synth. from Tetrachloroplatinate(II)(2-) [JCX42-F](#) + NO₂⁽⁻⁾,NH₃

Physical Description: Colourless needles

Solubility: Sol. H₂O

>>Variant: *trans*-form

CAS Registry Number: 15413-19-1

Molecular Formula: H₆N₄O₄Pt

Molecular Weight: 321.152

Accurate Mass: 321.003672

Percentage Composition: H 1.88%; N 17.45%; O 19.93%; Pt 60.74%

General Statement: Config. not confirmed

Source/Synthesis: Synth. from *cis*-form + NH₃ (aq.)

Solubility: Sol. H₂O

References:

Chugaev, L.A. *et al.*, *J.C.S.*, 1916, 1286, (*synth*)

Staples, P.J. *et al.*, *J.C.S.(A)*, 1969, 1058, (*reactions*)

Zheligovskaya, N.N. *et al.*, *Vestn. Mosk. Univ., Ser. 2: Khim.*, 1974, **15**, 174; *CA*, **81**, 171992h, (*synth*)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **3**, 1725, (*synth*)