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The Crystal and Molecular Structure of New Hydrogen Dinitrate of Nitrate(2,2',2''-terpyridyl) platinum(II) Ion, [Pt(terpy)ONO<sub>2</sub>][H(ONO<sub>2</sub>)<sub>2</sub>]


Crystal Structure of Nitrate(2,2',2''-terpyridyl)platinum(II) Hydrogen Dinitrate, [Pt(terpy)ONO<sub>2</sub>][H(ONO<sub>2</sub>)<sub>2</sub>]

Abdurrahman ŞENGÜL

Department of Chemistry, Faculty of Arts and Sciences, Karaelmas University

67100 Zonguldak-TURKEY

e-mail: sengul@karaelmas.edu.tr

 [Keywords](#)  
 [Authors](#)



[chem@tubitak.gov.tr](mailto:chem@tubitak.gov.tr)

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**Abstract:** The title compound, C<sub>15</sub>H<sub>12</sub>N<sub>6</sub>O<sub>9</sub>Pt, consists of [Pt(terpy)ONO<sub>2</sub>]<sup>+</sup> cation and [H(ONO<sub>2</sub>)<sub>2</sub>]<sup>-</sup> anion, in which 2 nitrate groups are linked by a strong hydrogen bond [O ⋯ O 2449(1) Å]. In the cation, the terpyridine is coordinated to Pt as a tridentate ligand and the fourth position is occupied by the nitrate ion's oxygen. The coordination around Pt is square-planar. The coordinated nitrate moiety adopts a distorted trigonal-planar configuration. It belongs to the space group P  $\bar{1}$  with a = 8.605(2), b = 10.220(3) Å, c = 10.517(2) Å and  $\alpha = 89.51(1)$ ,  $\beta = 82.78(2)$ ,  $\gamma = 76.90(2)^\circ$ .

**Key Words:** X-ray structure, terpyridine, hydrogen, nitrate, platinum, complex

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