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Synthesis and structure of solvate μ -oxo-bis[(nitrato)triphenylantimony] with benzene

© Vladimir V. Sharutin,^{*+} Olga K. Sharutina, and Nikolay V. Somov

Chemistry Faculty. South Ural State University. Lenin St., 76. Chelyabinsk, 454080. Russia.

Phone: +7 (351) 267-95-70. E-mail: vvsharutin@rambler.ru

^{*}Supervising author; ⁺Corresponding author

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Abstract

Interaction of μ -oxo-bis[(chloro)triphenylantimony] with silver nitrate produced the solvate of μ -oxo-bis[(nitrato)triphenylantimony] with benzene, the structure of which was established by X-ray diffraction. Antimony atoms in binuclear molecule have a distorted trigonal-bipyramidal coordination with bridging oxygen atom and a nitro group in the axial positions. Bond lengths of Sb-C are 2.105(2)-2.113(2) Å, Sb-O_{bridg} 1.968(2), 1.962(2) Å, Sb-O(NO₂) 2.241(2), 2.301(2) Å, OSbO 174.37(6)°, 177.59(7)°, SbOSb 142.22(6)°.