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Tetraphenylantimony and tetra-*p*-tolylantimony carbonates

© **Vladimir V. Sharutin**,*+ and **Olga K. Sharutina**
Faculty of Chemistry. National Research South Ural State University. Lenina 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

The features of the crystal structure of orthorhombic modification carbonate bis(tetraphenylantimony) (**I**) and monoclinic carbonate tetra-*para*-tolylfntimony (**II**). According to X-ray data molecules **I** and **II** present antimony atoms having trigonal-bipyramidal $Sb_{(5)}$, and octahedral coordination $Sb_{(6)}$. For atoms of $Sb_{(5)}$ axial angles CSb(1)O constitute 179.0(2)° and 175.2(1)°, equatorial CSb(1)C angles vary in the intervals 113.6(3) -124.9(3)° and 115.9(1)-124.1(1)° in **I** and **II**, respectively. Bond lengths Sb(1)–O and Sb(1)–C are 2.247(5) and 2.107(8), 2.118(8), 2.124(7), 2.174(8) Å (**I**), 2.264(2) and 2.117(4), 2.120(3), 2.126(3), 2.171(3) Å (**II**). Bond angles at atoms $Sb_{(6)}$ CSb(2)O, CSb(2)C are 163.3(2)°, 152.8(2)°, 161.6(3)° (**I**) и 151.8(1)°, 162.9(1)°, 165.6(1)° (**II**); Sb(2)–O and Sb(2)–C distance equal 2.273(5), 2.246(5) и 2.158(8)-2.179(8) Å (I), 2.217(2), 2.251(2) и 2.159(3)-2.177(3) Å (**II**).