

Bis(pentafluorobenzoate) and bis(1-adamantane carboxylate)-tris(5-bromine-2-methoxyphenyl)antimony. Synthesis and structure.

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Abstract

By interaction of *tris(5-bromine-2-methoxyphenyl)antimony* with pentafluorobenzoic and 1-adamantanecarboxylic acids in the presence of hydrogen peroxide we have synthesized *bis(penta fluorobenzoate) and bis(1-adamantanecarboxylate) tris(5-bromine-2-methoxyphenyl) antimony* [(5-Br)(2-MeO)C₆H₃]₃Sb[OC(O)R]₂, where R = C₆F₅ (**I**), C₁₀H₁₅ (**II**). According to the data of X-ray diffraction analysis, antimony atoms in **I**, **II** have distorted trigonal-bipyramidal coordination. Axial angles OSbO and angles in the equatorial plane CSbC are equal to 177.54(13)°, 171.7(4)° и 110.65(19)°–124.57(19)°, 113.3(12)–127.3(10)° respectively. Bond lengths Sb–O и Sb–C make up 2.086(3), 2.117(3), 2.100(5)–2.106(5) Å (**I**); 2.072(11), 2.074(11), 2.040(19)–2.16(2) Å (**II**). The intermolecular distance Sb⋯OCH₃ и Sb⋯O=C equals 3.088(5)–3.181(4) Å and 3.213(4), 3.330(5) Å (**I**), 3.100(5)–3.188(5) Å and 2.983(5), 3.094(5) Å (**II**).