Synthesis and structure of 2-bromo-4-formylphenoxytetraphenylantimony

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Abstract

By the reaction of pentaphenylantimony with 2-bromo-4-methoxyphenol in toluene there were obtained by heating 2-bromo-4-methoxyphenoxytetraphenylantimony and 2-bromo-4-formylphenoxytetraphenylantimony with the yield of 97%. According to X-ray analysis the antimony atom in the molecule of 2-bromo-4-formylphenoxyantimony has distorted trigonal bipyramidal configuration, bond lengths Sb-O and Sb-C are equal to 2.257(3) and 2.166(4), 2.113(4), 2.127(4), 2.122(4) Å, respectively, axial angle OSbC and equatorial angles CSbC are 176.8(1)° and 116.0(1)°, 118.7(1)°, 121.1(1)°.