**Short Communication** 

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## Synthesis and structure of the complex $[Ph_3BuP]^+_2[Sb_2I_8 \cdot C_4H_8O]^{2-}$

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## Abstract

The interaction of equimolar amounts of iodide triphenylbutylphosphonium and iodide antimony in the solution of tetrahydrofurane was performed to synthesize the complex  $[Ph_3BuP]^+_2[Sb_2I_8:C_4H_8O]^2$ . According to the X-ray the complex cation has a little distorted tetrahedral structure, antimony atoms in the centrosymmetric anion 6-coordinated, axial positions are occupied by iodine atoms and oxygen atoms of tetrahydrofuran (THF). Solvate THF molecule disordered over two positions with equal weight, distance Sb-O is 2.811(4) Å.