

## Synthesis and structure of $\mu$ -oxobis [(trifluoromethanesulfonate)-(tri-*para*-tolyl) antimony][(4-C<sub>6</sub>H<sub>4</sub>Me)<sub>3</sub>SbOSO<sub>2</sub>CF<sub>3</sub>]<sub>2</sub>O

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### Abstract

Reaction of tri-*para*-tolyl)antimony with trifluoromethanesulfonic acid in presence of tertiary butyl hydroperoxide in water-ether solution produces with the yield 95%  $\mu$ -oxo-bis[(trifluoromethanesulfonate)(tri-*para*-tolyl)antimony] (**I**). In the two types of crystallographically independent binuclear molecules **Ia** and **Ib** angles SbOSb make up 137.4(5)° and 137.5(5)° respectively. Antimony atoms have a distorted trigonal-bipyramidal coordination. Distances Sb-C vary in the range of 2.089(5)-2.121(5) Å. Bonds of antimony atoms with the bridging oxygen atom [1.941(4)-1.957(4) Å] are shorter than with oxygen atoms of trifluoromethanesulfonate group [2.356(4)-2.407(5) Å]. Axial angles O<sub>bridge</sub>SbO<sub>therm</sub> make up 175.4(2)-177.0(2)°.