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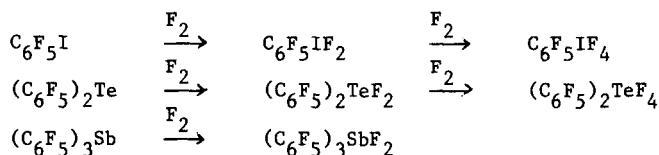
FLUORINATION REACTIONS OF ORGANOELEMENT COMPOUNDS WITH ELEMENTAL FLUORINE

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The fluorination reactions of some pentafluorophenyl element compounds with elemental fluorine at low temperature in the liquid phase are described.

The first step during the fluorination reactions of C_6F_5I , $(C_6F_5)_2Te$ and $(C_6F_5)_3Sb$ is the oxidation of I, Te and Sb, respectively:



During the further fluorination either a cleavage of the carbon element bond or an oxidation of the C_6F_5 groups are observed.

The direct fluorination of C_6F_5Br does not yield an organo bromine fluoride.

$(C_6F_5)_2Hg$ and $(CH_3)_xSn(C_6F_5)_y$ ($y = 1,2$) react with fluorine under cleavage of the carbon metal bond; C_6F_6 is formed as one main product.