

compound of rubidium chloride with antimony chloride. Of the three salts found this one contains the largest percentage of rubidium, and therefore approaches more nearly than either of the others to the composition required by Godeffroy's formula. The directions of Godeffroy were followed closely in preparing the salt, and in one case at least the two chlorides were present in solution in the proportions required by the above formula. The salt was examined crystallographically by Streng.<sup>1</sup> He describes it as forming hexagonal tables by a combination of the basal plane and fundamental pyramid, with a very slight development of the fundamental prism. In the present investigation no distinct development of the prism was observed. The pyramid faces were strongly striated in a horizontal direction, so that accurate measurements were impossible. The mean of three measurements of  $P:P$  over a middle edge gave him  $129^{\circ} 30'$ , from which he calculated the axial ratio  $a:c$  as  $1:1.836$ . The crystals obtained in the present investigation agree with the description of Streng. The angle measured by him was here found to vary between  $127^{\circ}$  and  $131^{\circ}$ , though the striations on the crystals prevented anything but the roughest measurements. Stauroscopic examination shows that the crystals are not really hexagonal in crystallisation; but as Streng does not seem to have examined his crystals optically, this disagreement in regard to the crystal system cannot be considered as evidence in favor of the two salts being different. The substance as prepared in this investigation was, to all outward appearance, hexagonal in crystallisation, and agreed exactly, except in the points mentioned, with the descriptions given by Godeffroy and by Streng. There can therefore be little doubt that the substances as obtained in the two investigations were identical. The conclusion is therefore drawn that no salt exists having the formula  $SbCl_4 \cdot 6RbCl$ .

As the five partial analyses already given showed that the formula of the salt was by no means simple, the matter was taken up again, with a view to obtaining a quantity of the salt in as pure a condition as possible, and then making several analyses. Having prepared a considerable amount of the substance, it was recrystallised five times from dilute hydrochloric acid. In the last two crystallisations the solution was cooled rapidly, so that the salt was deposited in very small, six-sided scales, possessing

<sup>1</sup> Archiv der Pharmacie [3] 9, 343.