Xenon Hexafluoroplatinato(ν) Xe⁺[PtF₆]⁻
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Tensimetric titration of xenon (AIRCO “Reagent Grade”) with platinum hexafluoride has proved the existence of a 1:1 compound, XePtF₆. This is an orange-yellow solid, which is insoluble in carbon tetrachloride, and has a negligible vapour pressure at room temperature. It sublimes in a vacuum when heated and the sublimate, when treated with water vapour, rapidly hydrolyses, xenon and oxygen being evolved and hydrated platinum dioxide deposited:

\[ 2\text{XePtF}_6 + 6\text{H}_2\text{O} \rightarrow 2\text{Xe} + \text{O}_2 + 2\text{PtO}_2 + 12\text{HF} \]

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