

## **Thermal Decomposition of Calcium Bis-Oxalatoindate(III) Hexahydrate**

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Indium(III) is precipitated with oxalic acid in the presence of calcium nitrate in slightly acidic solution of nitric acid. Chemical analysis of the complex salt obtained indicates the formula,  $\text{Ca}[\text{In}(\text{C}_2\text{O}_4)_2(\text{H}_2\text{O})_2]_2 \cdot 6\text{H}_2\text{O}$ . The thermal decomposition behavior of the complex was studied using TG, DTA and DTG techniques. These studies indicated the formation of anhydrous calcium indium oxalate and then to a mixture of oxides through the formation of calcium carbonate and indium(III) oxide as intermediates. Isothermal study, X-ray diffraction pattern and IR spectral data support the proposed thermal decomposition mechanism.