

## Complexes of yttrium and lanthanide perchlorate with 4-N-(2'-thienylidene)aminoantipyrine

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Perchlorate complexes of ten lanthanides with a Schiff base 4-N-(2'-thienylidene) aminoantipyrine (TAA) were synthesised and characterised by elemental analyses, molar conductance, infrared, PNMR as well as electronic spectra and thermogravimetric studies. The complexes may be formulated as  $[\text{Ln}(\text{TAA})_3(\text{ClO}_4)](\text{ClO}_4)_2$ , where  $\text{Ln} = \text{Y, La, Pr, Nd, Sm, Eu, Gd, Dy, Ho}$  or  $\text{Er}$ . The ligand TAA acts as a neutral tridentate one in these complexes. One of the perchlorate ions is coordinated monodentately while the other two are ionic. The complexes are thermally stable up to  $180^\circ\text{C}$  and decompose in two stages. A coordination number of ten may be assigned to the metal ion in these complexes.

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