



>>Entry Name: Tris(trifluoromethanesulfonato)erbium

Synonym(s): Erbium trifluoromethanesulfonate. Erbium triflate

CAS Registry Number: 139177-64-3

$\text{Er}(\text{OSO}_2\text{CF}_3)_3$

Molecular Formula: $\text{C}_3\text{ErF}_9\text{O}_9\text{S}_3$

Molecular Weight: 614.471

Accurate Mass: 612.786362

Percentage Composition: C 5.86%; Er 27.22%; F 27.83%; O 23.43%; S 15.66%

Source/Synthesis: Synth. by boiling $\text{ErCl}_3 \cdot x\text{H}_2\text{O}$ or Er_2O_3 with $\text{F}_3\text{CSO}_3\text{H}$, followed by thermal dehydration

Use/Importance: Fluorescent

Physical Description: White solid

Solubility: Sol. H_2O

Other Data: Isomorphous with La, Nd, Sm, Gd analogues

Aldrich: 42567-2

Fluka: 45415

References:

Hamidi, M.E.M. *et al.*, *Polyhedron*, 1994, **13**, 1787, (*synth, ir, Raman*)