

TcOF ₄	<i>hP36</i>	(176) <i>P6₃/m – ih⁴</i>
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TcOF₄ hexagonal [1]

Structural features: Rings of three vertex-linked Tc(OF₅) octahedra in a Mg-type (h.c.p.) arrangement.

Edwards A.J. et al. (1970) [1]

F₄OTc

$a = 0.9$, $c = 0.792$ nm, $c/a = 0.880$, $V = 0.5556$ nm³, $Z = 6$

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
F1	12 <i>i</i>	1	0.1224	0.4217	0.0267		single atom Tc
Tc2	6 <i>h</i>	<i>m</i> ..	0.0768	0.3982	¹ / ₄		octahedron OF ₅
F3	6 <i>h</i>	<i>m</i> ..	0.0988	0.2079	¹ / ₄		single atom Tc
F4	6 <i>h</i>	<i>m</i> ..	0.3646	0.5139	¹ / ₄		single atom Tc
O5	6 <i>h</i>	<i>m</i> ..	0.4595	0.1323	¹ / ₄		single atom Tc

Experimental: single crystal, Weissenberg photographs, X-rays, R = 0.108

References: [1] Edwards A.J., Jones G.R., Sills R.J.C. (1970), J. Chem. Soc. A 1970, 2521-2523.