

[BO₃]Te₃F₁₅

*hP*44

(176) *P*6₃/*m* – i²h³c

B(OTeF₅)₃ [1]

Structural features: B(OTeF₅)₃ units (three Te(F₅O) octahedra sharing vertices with a central BO₃ trigonal unit) in a Mg-type (h.c.p.) arrangement.

Sawyer J.F., Schrobilgen G.J. (1982) [1]

BF₁₅O₃Te₃

a = 0.9218, *c* = 0.9207 nm, *c/a* = 0.999, *V* = 0.6775 nm³, *Z* = 2

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
F1	12 <i>i</i>	1	0.109	0.3096	0.1098		single atom Te
F2	12 <i>i</i>	1	0.5124	0.1156	0.1122		single atom Te
Te3	6 <i>h</i>	<i>m</i> ..	0.0014	0.3569	¹ / ₄		octahedron F ₅ O
O4	6 <i>h</i>	<i>m</i> ..	0.1632	0.585	¹ / ₄		single atom B
F5	6 <i>h</i>	<i>m</i> ..	0.2986	0.1615	¹ / ₄		single atom Te
B6	2 <i>c</i>	-6..	¹ / ₃	² / ₃	¹ / ₄		coplanar triangle O ₃

Transformation from published data: *y*,*x*,*-z*

Experimental: single crystal, diffractometer, X-rays, *R* = 0.031

References: [1] Sawyer J.F., Schrobilgen G.J. (1982), *Acta Crystallogr. B* 38, 1561-1563.