

$\text{Tl}_3[\text{BO}_3]$	$hP14$	$(176) P6_3/m - h^2c$
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Tl_3BO_3 [2]

Structural features: BO_3 trigonal units in a Mg-type (h.c.p.) arrangement; Tl forms coplanar triangle-mesh layers.

Verbaere A. et al. (1978) [1]

BO_3Tl_3

$a = 0.9275$, $c = 0.3775$ nm, $c/a = 0.407$, $V = 0.2812$ nm³, $Z = 2$

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	$6h$	$m..$	0.1593	0.5898	$\frac{1}{4}$		single atom B
Tl2	$6h$	$m..$	0.3551	0.0588	$\frac{1}{4}$		non-coplanar triangle O_3
B3	$2c$	$-6..$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{1}{4}$		coplanar triangle O_3

Transformation from published data: origin shift 0 0 $\frac{1}{2}$

Remarks: Electrostatic model; the position of the Tl electron lone-pair was determined from the evaluation of the electrical field at the Tl(I) nucleus.

References: [1] Verbaere A., Marchand R., Tournoux M. (1978), J. Solid State Chem. 23, 383-390. [2] Marchand R., Piffard Y., Tournoux M. (1973), C. R. Seances Acad. Sci., Ser. C 276, 177-179.