$Tb_2CBrH_{0.83}$	*hP*12	(186) $P6_3mc$ – b^4a^2

$Tb_2BrCH_{0.83}$ [1]
Structural features: Infinite slabs of edge-linked CTb_6 octahedra and close-packed Br layers (partial stacking disorder) alternate along [001]; H in trigonal voids in Tb layers.

Ruck M., Simon A. (1992) [1]
$BrCD_{0.40}Tb_2$
a = 0.37395, c = 1.4331 nm, c/a = 3.832, V = 0.1736 nm^3, Z = 2

site	Wyck.	sym.	x	y	z	occ.	atomic environment
Tb1	2*b*	3*m*.	$^1/_3$	$^2/_3$	0.155		non-coplanar triangle C_3
D2	2*b*	3*m*.	$^1/_3$	$^2/_3$	0.342	0.395	tetrahedron Tb_3Br
Br3	2*b*	3*m*.	$^1/_3$	$^2/_3$	0.506	0.46	4-vertex polyhedron Br_3D
Tb4	2*b*	3*m*.	$^1/_3$	$^2/_3$	0.834		non-coplanar triangle D_3
Br5	2*a*	3*m*.	0	0	0.0	0.54	non-coplanar triangle Br_3
C6	2*a*	3*m*.	0	0	0.225		non-coplanar triangle Tb_3

Transformation from published data: -*x*,-*y*,-*z*; origin shift 0 0 0.275
Experimental: powder, diffractometer, neutrons, R_B = 0.160

Remarks: Composition $Tb_2BrCH_{0.83}$ from chemical analysis; part of H not located.

References: [1] Ruck M., Simon A. (1992), Z. Anorg. Allg. Chem. 617, 7-18.