$Tl_{0.02}V_3S_4$	*hP*18	(176) $P6_3/m$ – h^2ed

$Tl_{0.033}V_6S_8$ [1]
Structural features: Units of three face-linked VS_6 octahedra share edges to form a 3D-framework; Tl in channels of hexagonal cross-section parallel to [001] (partial disorder). Filled-up derivative of Nb_3Te_4.

Bensch W. et al. (1992) [1]
$S_4Tl_{0.02}V_3$
a = 0.9137, c = 0.33071 nm, c/a = 0.362, V = 0.2391 nm^3, Z = 2

site	Wyck.	sym.	x	y	z	occ.	atomic environment
V1	6*h*	*m*..	0.1215	0.4874	$^1/_4$		octahedron S_6
S2	6*h*	*m*..	0.2971	0.3474	$^1/_4$		non-coplanar triangle V_3
Tl3	4*e*	3..	0	0	0.133	0.008	
S4	2*d*	-6..	$^2/_3$	$^1/_3$	$^1/_4$		trigonal prism V_6

Experimental: single crystal, diffractometer, X-rays, wR = 0.018, T = 293 K

Remarks: We derived approximate values for the refinable atom coordinates from interatomic distances. Short interatomic distances for partly occupied site(s). In table 2 of [1] the chemical formula is misprinted as $Tl_{0.003}V_6S_8$ instead of $Tl_{0.033}V_6S_8$; on page 199 the occupancy of former site Tl is misprinted as 0.084 instead of 0.0084.

References: [1] Bensch W., Koy J., Wesemann M. (1992), J. Alloys Compd. 178, 193-204.