$Ag_{10.6}Te_7$	*hP*155	(189) *P*-62*m* – $l^7kji^5h^2g^2f^3e^3$

$Ag_{5-x}Te_3$ [1], stützite
Structural features: Kagomé-mesh Te_3 layers alternate with $Te_2(Te_2)$ layers (a Te hexagon mesh, the hexagons of which are centered by a Te_2 dumbbell perpendicular to the layer) along [001]; Ag delocalized over 13 sites.

Peters J. et al. (1996) [1]
$Ag_{10.58}Te_7$
a = 1.3456, c = 1.6917 nm, c/a = 1.257, V = 2.6527 nm^3, Z = 6

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
Ag1	12*l*	1	0.046	0.544	0.1081	0.25	
Ag2	12*l*	1	0.151	0.450	0.366	0.18	
Ag3	12*l*	1	0.159	0.451	0.133	0.18	
Te4	12*l*	1	0.1785	0.3004	0.2496		
Ag5	12*l*	1	0.2079	0.4220	0.4020	0.76	
Ag6	12*l*	1	0.2163	0.4157	0.0963	0.67	
Ag7	12*l*	1	0.3448	0.5400	0.2476		
Ag8	6*k*	*m*..	0.1357	0.5706	$^1/_2$	0.80	
Ag9	6*j*	*m*..	0.147	0.583	0	0.39	non-colinear Ag_2
Ag10	6*i*	..*m*	0.1947	0	0.3701	0.98	
Ag11	6*i*	..*m*	0.1970	0	0.1170	0.77	
Te12	6*i*	..*m*	0.4301	0	0.2520		
Ag13	6*i*	..*m*	0.5610	0	0.1308	0.50	
Ag14	6*i*	..*m*	0.5756	0	0.3624	0.74	12-vertex polyhedron Te_4Ag_8
Te15	4*h*	3..	$^1/_3$	$^2/_3$	0.1103		
Te16	4*h*	3..	$^1/_3$	$^2/_3$	0.3875		
Te17	3*g*	*m*2*m*	0.3252	0	$^1/_2$		
Te18	3*g*	*m*2*m*	0.6898	0	$^1/_2$		
Te19	3*f*	*m*2*m*	0.3431	0	0		
Te20	3*f*	*m*2*m*	0.6757	0	0		
Ag21	3*f*	*m*2*m*	0.8753	0	0	0.64	
Te22	2*e*	3.*m*	0	0	0.081	0.33	
Te23	2*e*	3.*m*	0	0	0.1398	0.67	
Te24	2*e*	3.*m*	0	0	0.4185		tetrahedron Ag_3Te

Experimental: single crystal, diffractometer, X-rays, R = 0.073, T = 293 K

Remarks: Homogeneity range $Ag_{5-x}Te_3$, $0 < x < 0.14$ (refined composition outside). Short interatomic distances for partly occupied site(s). Data quoted in [2] (structure confirmed by electron diffraction on thin film). In [2] the mineral name is misprinted as steutzite instead of stuetzite.

References: [1] Peters J., Conrad O., Bremer B., Krebs B. (1996), Z. Anorg. Allg. Chem. 622, 1823-1832. [2] Kälin W., Günter J.R. (1996), J. Solid State Chem. 123, 391-397.