$K_{19}Na_6AuTl_{24}$	*hP*100	(189) *P*-62*m* – $l^3k^2j^2i^4g^2f^2dc$

$K_{38}Na_{12}Tl_{48}Au_2$ [1]
Structural features: Single Tl_7 (pentagonal bipyramid) and Tl_9 (defect icosahedron corresponding to two interpenetrating pentagonal bipyramids) units; $K^+_{38}Na^+_{12}[Tl_7]^{7-}_3[Tl_9]^{9-}_3Au^-_2$.

Huang D. et al. (1998) [1]
$AuK_{19}Na_6Tl_{24}$
a = 1.9347, c = 1.1501 nm, c/a = 0.594, V = 3.7281 nm^3, Z = 2

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
Tl1	12*l*	1	0.16313	0.48889	0.3646		11-vertex polyhedron Tl_4NaK_6
Na2	12*l*	1	0.174	0.329	0.244		icosahedron Tl_6K_6
K3	12*l*	1	0.3343	0.5125	0.1585		11-vertex polyhedron Tl_5NaAuK_4
Tl4	6*k*	*m*..	0.0981	0.3186	$^1/_2$		icosahedron $Na_2Tl_6K_4$
K5	6*k*	*m*..	0.3336	0.4683	$^1/_2$		15-vertex Frank-Kasper $K_5Tl_8Na_2$
K6	6*j*	*m*..	0.121	0.4432	0		15-vertex Frank-Kasper $Tl_6K_6Na_2Au$
Tl7	6*j*	*m*..	0.2436	0.3449	0		icosahedron $Na_2Tl_6K_4$
K8	6*i*	..*m*	0.1294	0	0.313		pseudo Frank-Kasper $Tl_5Na_2K_6$
Tl9	6*i*	..*m*	0.3245	0	0.2697		11-vertex polyhedron $Tl_5Na_2K_4$
Tl10	6*i*	..*m*	0.6572	0	0.2286		11-vertex polyhedron $Na_2Tl_4K_5$
Tl11	6*i*	..*m*	0.8242	0	0.1394		11-vertex polyhedron $Tl_4Na_2K_5$
Tl12	3*g*	*m*2*m*	0.422	0	$^1/_2$		10-vertex polyhedron Tl_8K_2
K13	3*g*	*m*2*m*	0.7819	0	$^1/_2$		16-vertex Frank-Kasper $Tl_6Na_4K_6$
K14	3*f*	*m*2*m*	0.2118	0	0		16-vertex Frank-Kasper $Tl_8K_4Na_4$
Tl15	3*f*	*m*2*m*	0.5598	0	0		10-vertex polyhedron Tl_4K_6
K16	2*d*	-6..	$^1/_3$	$^2/_3$	$^1/_2$		tricapped trigonal prism Tl_6K_3
Au17	2*c*	-6..	$^1/_3$	$^2/_3$	0		tricapped trigonal prism K_9

Transformation from published data: -*x*,-*y*,-*z*
Experimental: single crystal, diffractometer, X-rays, wR = 0.023, T = 296 K

References: [1] Huang D., Dong Z.C., Corbett J.D. (1998), Inorg. Chem. 37, 5881-5886.