$Ag_8V_2I_4O_7$	*hP*72	(189) *P*-62*m* – $l^2k^2i^2hg^3f^2eca$

$Ag_8V_2O_7I_4$ [1]
Structural features: I forms directly superposed hexagon-mesh layers; units of two vertex-linked VO_4 tetrahedra parallel to [001] center the hexagons of every second layer; Ag in approximately linear (O_2) voids.

Adams S. (1996) [1]
$Ag_{8.01}I_4O_7V_2$
a = 1.2595, c = 0.9119 nm, c/a = 0.724, V = 1.2528 nm^3, Z = 3

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
Ag1	12*l*	1	0.1532	0.3364	0.2243	0.99	non-colinear O_2
O2	12*l*	1	0.3212	0.534	0.256		single atom V
I3	6*k*	*m*..	0.2707	0.2896	$^1/_2$	0.5	
Ag4	6*k*	*m*..	0.3078	0.5248	$^1/_2$	0.65	non-colinear O_2
O5	6*i*	..*m*	0.1249	0	0.2622		single atom V
Ag6	6*i*	..*m*	0.5313	0	0.2372	0.96	non-colinear O_2
V7	4*h*	3..	$^1/_3$	$^2/_3$	0.1951		tetrahedron O_4
Ag8	3*g*	*m*2*m*	0.1443	0	$^1/_2$	0.54	non-colinear Ag_2
I9	3*g*	*m*2*m*	0.3856	0	$^1/_2$		coplanar triangle Ag_3
Ag10	3*g*	*m*2*m*	0.872	0	$^1/_2$	0.29	
I11	3*f*	*m*2*m*	0.3667	0	0		trigonal prism Ag_6
I12	3*f*	*m*2*m*	0.6964	0	0		trigonal prism Ag_6
V13	2*e*	3.*m*	0	0	0.1936		tetrahedron O_4
O14	2*c*	-6..	$^1/_3$	$^2/_3$	0		colinear V_2
O15	1*a*	-62*m*	0	0	0		colinear V_2

Transformation from published data: origin shift 0 0 $^1/_2$
Experimental: single crystal, diffractometer, X-rays, R = 0.040, T = 293 K
Remarks: Cell parameters from [2]. Short interatomic distances for partly occupied site(s).

References: [1] Adams S. (1996), Z. Kristallogr. 211, 770-776. [2] Adams S., Hariharan K., Maier J. (1995), Solid State Ionics 75, 193-201.