$Ca_4Ag(Ag_{0.2}Si_{0.8})_3Si_{3.2}$	*hP*24	(187) *P*-6*m*2 – nk^2j^2hfeba

$Ca_8Ag_{3.2}Si_{11.24}$ [1]
Structural features: 3D-framework of fused Ca_6 trigonal prisms centered by Si, (Si,Ag) and Ag (partial vacancies ignored). Substitution derivative of AlB_2.

Merlo F. et al. (1996) [1]
$Ag_{1.60}Ca_4Si_{5.62}$
$a = 0.8304$, $c = 0.8643$ nm, $c/a = 1.041$, $V = 0.5161$ nm^3, $Z = 2$

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
Ca1	6*n*	.*m*.	0.83347	0.16653	0.2504		pseudo Frank-Kasper $Si_{10}Ag_2Ca_8$
M2	3*k*	*mm*2	0.16667	0.83333	$^1/_2$		tricapped trigonal prism Si_3Ca_6
M3	3*k*	*mm*2	0.50067	0.49933	$^1/_2$		tricapped trigonal prism Si_3Ca_6
Si4	3*j*	*mm*2	0.17457	0.82543	0		tricapped trigonal prism Si_2AgCa_6
Si5	3*j*	*mm*2	0.49367	0.50633	0	0.48	tricapped trigonal prism Si_2AgCa_6
Ca6	2*h*	3*m*.	$^1/_3$	$^2/_3$	0.2488		pseudo Frank-Kasper $Si_{12}Ca_8$
Si7	1*f*	-6*m*2	$^2/_3$	$^1/_3$	$^1/_2$		tricapped trigonal prism Si_3Ca_6
Ag8	1*e*	-6*m*2	$^2/_3$	$^1/_3$	0		tricapped trigonal prism Si_3Ca_6
Si9	1*b*	-6*m*2	0	0	$^1/_2$		tricapped trigonal prism Si_3Ca_6
Ag10	1*a*	-6*m*2	0	0	0		tricapped trigonal prism Si_3Ca_6

M2 = 0.77Si + 0.23Ag; M3 = 0.83Si + 0.17Ag
Transformation from published data: origin shift $^1/_3$ $^2/_3$ 0
Experimental: single crystal, diffractometer, X-rays, wR = 0.096

References: [1] Merlo F., Pani M., Fornasini M.L. (1996), J. Alloys Compd. 232, 289-295.