$Mg_2Cu_6Al_5$	*cP*39	(200) *Pm*-3 – jihgfa

$Mg_2Cu_6Al_5$ [1]
Structural features: $AlCu_{12}$ icosahedra and empty Cu_6 octahedra in a CsCl-type arrangement, separated by additional Al and Mg atoms. Ordering variant of Mg_2Zn_{11}.

Samson S. (1949) [1]
$Al_5Cu_6Mg_2$
a = 0.8311 nm, V = 0.5741 nm^3, Z = 3

site	Wyck.	sym.	x	y	z	occ.	atomic environment
Cu1	12*j*	*m*..	0	0.164	0.257		icosahedron $Al_4Cu_5Mg_3$
Al2	8*i*	.3.	0.285	0.285	0.285		icosahedron $Cu_6Al_3Mg_3$
Cu3	6*h*	*mm*2..	0.275	$^1/_2$	$^1/_2$		10-vertex polyhedron Al_6Cu_4
Al4	6*g*	*mm*2..	0.34	$^1/_2$	0		pseudo Frank-Kasper $Cu_4Al_5Mg_4$
Mg5	6*f*	*mm*2..	0.18	0	$^1/_2$		7-capped pentagonal prism Cu_8Al_8Mg
Al6	1*a*	*m*-3.	0	0	0		icosahedron Cu_{12}

Transformation from published data: *y*,*x*,-*z*; origin shift $^1/_2$ $^1/_2$ $^1/_2$
Experimental: single crystal, Weissenberg and rotation photographs, X-rays

References: [1] Samson S. (1949), Acta Chem. Scand. 3, 809-834.