

AgCd<sub>3</sub>Zr<sub>3</sub>F<sub>20</sub>*hP*54(176) *P*6<sub>3</sub>/*m* – ih<sup>6</sup>cba**AgCd<sub>3</sub>Zr<sub>3</sub>F<sub>20</sub>** [1]

Structural features: ZrF<sub>7</sub> and CdF<sub>7</sub> pentagonal bipyramids share edges to form infinite slabs, which are interconnected via common vertices to form a 3D-framework; Ag in trigonal bipyramidal voids.

Graudejus O., Müller B.G. (1996) [1]

AgCd<sub>3</sub>F<sub>20</sub>Zr<sub>3</sub>*a* = 1.052, *c* = 0.8286 nm, *c/a* = 0.788, *V* = 0.7942 nm<sup>3</sup>, *Z* = 2

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
F1	12 <i>i</i>	1	0.4252	0.1456	0.0115		non-colinear ZrCd
F2	6 <i>h</i>	<i>m</i> ..	0.0355	0.2352	<sup>1</sup> / <sub>4</sub>		single atom Zr
F3	6 <i>h</i>	<i>m</i> ..	0.0591	0.4734	<sup>1</sup> / <sub>4</sub>		single atom Zr
Cd4	6 <i>h</i>	<i>m</i> ..	0.27257	0.43437	<sup>1</sup> / <sub>4</sub>		pentagonal bipyramid F <sub>7</sub>
F5	6 <i>h</i>	<i>m</i> ..	0.2797	0.2257	<sup>1</sup> / <sub>4</sub>		non-colinear ZrCd
Zr6	6 <i>h</i>	<i>m</i> ..	0.4158	0.13759	<sup>1</sup> / <sub>4</sub>		pentagonal bipyramid F <sub>7</sub>
F7	6 <i>h</i>	<i>m</i> ..	0.6341	0.1841	<sup>1</sup> / <sub>4</sub>		non-colinear Zr <sub>2</sub>
F8	2 <i>c</i>	-6..	<sup>1</sup> / <sub>3</sub>	<sup>2</sup> / <sub>3</sub>	<sup>1</sup> / <sub>4</sub>		coplanar triangle Cd <sub>3</sub>
F9	2 <i>b</i>	-3..	0	0	0		colinear Ag <sub>2</sub>
Ag10	2 <i>a</i>	-6..	0	0	<sup>1</sup> / <sub>4</sub>		trigonal bipyramid F <sub>5</sub>

Transformation from published data: *y*,*x*,*-z*; origin shift 0 0 <sup>1</sup>/<sub>2</sub>Experimental: single crystal, diffractometer, X-rays, *R* = 0.054References: [1] Graudejus O., Müller B.G. (1996), *Z. Anorg. Allg. Chem.* 622, 1549-1556.