$CaAl_2[OH]_8[H_2O]_{3.84}$	*hP*96	(176) $P6_3/m - i^6h^4$

$CaAl_2(OH)_8(H_2O)_2 \cdot 1.84H_2O$ [1], cement CAH_{10}
Structural features: Units of three edge-linked $Ca(OH)_6(OH_2)_2$ bicapped trigonal prisms and units of two edge-linked $Al(OH)_6$ octahedra share edges to form a 3D-framework; additional H_2O between the units and in large channels parallel to [001].

Guirado F. et al. (1998) [1]
$Al_2CaH_{15.68}O_{11.84}$
a = 1.6387, c = 0.8279 nm, c/a = 0.505, V = 1.9253 nm^3, Z = 6

site	Wyck.	sym.	x	y	z	occ.	atomic environment
$(OH_2)1$	12*i*	1	0.0	0.249	0.079	0.71	non-coplanar triangle $(OH)(OH_2)_2$
Al2	12*i*	1	0.0826	0.5795	0.068		octahedron $(OH)_6$
$(OH_2)3$	12*i*	1	0.168	0.403	0.039		single atom Ca
(OH)4	12*i*	1	0.213	0.623	0.072		single atom Al
(OH)5	12*i*	1	0.436	0.106	0.09		single atom Al
(OH)6	12*i*	1	0.574	0.053	0.072		non-colinear Al_2
(OH)7	6*h*	*m*..	0.077	0.505	$^1/_4$		non-colinear Al_2
Ca8	6*h*	*m*..	0.2394	0.5185	$^1/_4$		square antiprism $(OH_2)_2(OH)_6$
(OH)9	6*h*	*m*..	0.337	0.435	$^1/_4$		non-colinear Al_2
$(OH_2)10$	6*h*	*m*..	0.567	0.251	$^1/_4$	0.42	tetrahedron $(OH_2)_2(OH)_2$

Transformation from published data: origin shift 0 0 $^1/_2$
Experimental: powder, diffractometer, X-rays, R_B = 0.086

Remarks: Hydrogen atoms are not taken into consideration for Pearson symbol, Wyckoff sequence and atomic environments.

References: [1] Guirado F., Gali S., Chinchon S., Rius J. (1998), Angew. Chem. Int. Ed. 37, 72-75 (Angew. Chem. 110, 76-79).