$(K_{0.2}Na_{0.8})_2Ca[CO_3]_2$	*hP*22	(186) $P6_3mc$ – $c^2b^3a^2$

$(Na,K)_2Ca(CO_3)_2$ ht [1], nyerereite high
Structural features: CO_3 trigonal units (perpendicular to [001]) arranged in triangle-mesh layers (hc stacking); (Na,K) in "octahedral" voids, Ca in the carbonate layers.

McKie D., Frankis E.J. (1977) [1]
$C_2CaK_{0.36}Na_{1.64}O_6$
a = 0.505, c = 1.285 nm, c/a = 2.545, V = 0.2838 nm^3, Z = 2

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	6*c*	.*m*.	0.48	0.52	0.0		single atom C
O2	6*c*	.*m*.	0.85	0.15	0.25		single atom C
C3	2*b*	3*m*.	$^1/_3$	$^2/_3$	0.0		coplanar triangle O_3
M4	2*b*	3*m*.	$^1/_3$	$^2/_3$	0.325		9-vertex polyhedron O_9
Na5	2*b*	3*m*.	$^1/_3$	$^2/_3$	0.625		octahedron O_6
Ca6	2*a*	3*m*.	0	0	0.0		coplanar hexagon O_6
C7	2*a*	3*m*.	0	0	0.25		coplanar triangle O_3

M4 = 0.64Na + 0.36K
Transformation from published data: origin shift 0 0 0.5
Experimental: single crystal, Weissenberg photographs, X-rays, T = 613 K

Remarks: Phase stable at T > 613 K. Natural specimen from the Oldoinyo Lengai volcano,Tanzania; heated in situ.

References: [1] McKie D., Frankis E.J. (1977), Z. Kristallogr. 145, 73-95.