

Riversideite**Ca₅Si₆O₁₆(OH)₂•2H₂O**

©2001 Mineral Data Publishing, version 1.2

Crystal Data: Orthorhombic. *Point Group:* n.d. Cross-veinlet fibrous, to 1 cm; massive.**Physical Properties:** *Cleavage:* {001}, perfect; {100}, secondary. *Hardness =* Soft. *D*(meas.) = n.d. *D*(calc.) = 2.6–2.7**Optical Properties:** Translucent to nearly opaque. *Color:* White. *Luster:* Silky. *Optical Class:* Biaxial (+). *Orientation:* *X* = *c*; *Y* = *b*; *Z* = *a*. *Dispersion:* Observed. $\alpha = 1.600(2)$ $\beta = 1.601(2)$ $\gamma = 1.605(2)$ *2V*(meas.) = Small.**Cell Data:** *Space Group:* n.d. *a* = 11.3 *b* = 7.30 *c* = 18.0 *Z* = 4**X-ray Powder Pattern:** Crestmore, California, USA; from 9.3 Å product of dehydrated tobermorite.

3.03 (vs), 2.33 (s), 1.83 (s), 9.3 (m), 3.59 (m), 2.78 (m), 1.66 (m)

Chemistry:

	(1)	(2)
SiO ₂	35.3	51.87
TiO ₂	< 0.1	
Al ₂ O ₃	1.3	
Fe ₂ O ₃	0.4	
MgO	1.4	
CaO	48.2	40.35
H ₂ O ⁺	13.3	7.78
Total	[100.0]	100.00

(1) Crestmore, California, USA; recalculated to 100.0% after deduction of CaO in calcite and P₂O₅ and SO₄ in apatite. (2) Ca₅Si₆O₁₆(OH)₂•2H₂O.**Occurrence:** As intimate intergrowths with apatite, in veinlets cutting contact metamorphosed limestone (Crestmore, California, USA).**Association:** Apatite, vesuvianite, diopside, calcite, wollastonite (Crestmore, California, USA).**Distribution:** From Crestmore, Riverside Co., California, USA. At Ballycraigy, near Larne, Co. Antrim, Ireland. In the Hatrurim Formation, Israel.**Name:** For the first-noted occurrence in Riverside Co., California, USA.**Type Material:** National Museum of Natural History, Washington, D.C., USA, 93416.**References:** (1) Eakle, A.S. (1917) Minerals associated with the crystalline limestone at Crestmore, Riverside County, California. *Bull. Dept. Geol. Univ. Calif.*, 10(19), 327–360. (2) Taylor, H.F.W. (1953) Crestmoreite and riversideite. *Mineral. Mag.*, 30, 155–165. (3) McConnell, J.D.C. (1954) The hydrated calcium silicates riversideite, tobermorite, and plombierite. *Mineral. Mag.*, 30, 293–305. (4) Heller, L. and H.F.W. Taylor (1956) Crystallographic data for the calcium silicates. H.M. Stationary Office, London, 30–45. (5) Taylor, H.F.W. (1957) The dehydration of tobermorite. *Clays and Clay Minerals*, 6, 101–109. (6) Mamedov, K.S. and N.V. Belov (1958) Crystal structure of tobermorite (tobermorites). *Doklady Acad. Nauk SSSR*, 123, 163–165 (in Russian). (7) (1959) *Chem. Abs.*, 53, 5030 (abs. ref. 6).