

Crystal Data: Orthorhombic. *Point Group:* n.d. Microcrystalline grains, to 4 μm, in porous punky masses.

Physical Properties: *Fracture:* Subconchoidal to irregular. Hardness = 1, in aggregate. D(meas.) = 2.141(3) D(calc.) = 2.116 by the rule of Gladstone and Dale.

Optical Properties: Transparent. *Color:* White; in transmitted light, colorless. *Optical Class:* Biaxial. *n* = 1.466 2*V*(meas.) = n.d.

Cell Data: *Space Group:* n.d. *a* = 14.519(5) *b* = 18.80(1) *c* = 15.938(4) *Z* = [28]

X-ray Powder Pattern: Trinity Center, California, USA.

14.50 (100), 3.424 (82), 3.143 (35), 3.627 (27), 3.540 (25), 7.31 (22), 7.07 (21)

| Chemistry: | (1) | (2) | (1) | (2) |
|--------------------------------|-------|-------|-------------------------------|--------------|
| SiO ₂ | 88.93 | 90.91 | K ₂ O | 0.01 |
| TiO ₂ | 0.01 | | F | 0.00 |
| Al ₂ O ₃ | 0.01 | | Cl | 0.01 |
| Fe ₂ O ₃ | 0.04 | | H ₂ O ⁺ | 3.13 |
| FeO | 0.02 | | H ₂ O ⁻ | 6.65 |
| MnO | 0.00 | | H ₂ O | 9.09 |
| MgO | 0.71 | | CO ₂ | 0.07 |
| CaO | 0.11 | | P ₂ O ₅ | 0.00 |
| Na ₂ O | 0.05 | | Total | 99.75 100.00 |

(1) Trinity Center, California, USA. (2) 3SiO₂•H₂O.

Occurrence: Formed by the leaching of sodium from magadiite by near-surface water.

Association: Magadiite.

Distribution: About 10 km east of Trinity Center, Trinity Co., California, USA.

Name: For the SILica and water of HYDRation in its composition.

Type Material: National Museum of Natural History, Washington, D.C., USA, 125042.

References: (1) Gude, A.J., 3rd and R.A. Sheppard (1972) Silhydrite, 3SiO₂•H₂O, a new mineral from Trinity County, California. *Amer. Mineral.*, 57, 1053–1065.