

# Sinjarite

# CaCl<sub>2</sub>·2H<sub>2</sub>O

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**Crystal Data:** Tetragonal. *Point Group:* n.d. As elongated to rhombic crystals, in granular massive aggregates.

**Physical Properties:** *Cleavage:* Prismatic, good. Hardness = 1.5 D(meas.) = 1.66 D(calc.) = [1.60] Very hygroscopic.

**Optical Properties:** Semitransparent. *Color:* Pale pink. *Streak:* White. *Luster:* Vitreous to resinous.

*Optical Class:* Uniaxial.  $n = 1.54$

**Cell Data:** *Space Group:* n.d. (synthetic).  $a = 7.21$   $c = 5.86$   $Z = [2]$

**X-ray Powder Pattern:** Sinjar, Iraq.

2.82 (100), 3.04 (99), 6.09 (86), 2.96 (71), 2.73 (71), 3.06 (66), 2.36 (51)

**Chemistry:**

	(1)	(2)
Na	0.85	
Ca	25.84	27.26
Cl	46.64	48.23
H <sub>2</sub> O	26.55	24.51
Total	99.88	100.00

(1) Sinjar, Iraq; averages of several determinations, Na by flame photometer, H<sub>2</sub>O taken as loss on ignition. (2) CaCl<sub>2</sub>·2H<sub>2</sub>O.

**Occurrence:** In a dry stream bed, apparently precipitated from groundwater.

**Association:** n.d.

**Distribution:** From near Sinjar, west of Mosul, Iraq.

**Name:** For a town near the occurrence, Sinjar, Iraq.

**Type Material:** Museum of Natural History, University of Mosul, Mosul, Iraq.

**References:** (1) Aljubouri, Z.A. and S.M. Aldabbagh (1980) Sinjarite, a new mineral from Iraq. *Mineral. Mag.*, 43, 643-645. (2) (1980) *Amer. Mineral.*, 65, 1069 (abs. ref. 1).