

Crystal Data: Orthorhombic. *Point Group:* $2/m\ 2/m\ 2/m$. Cryptocrystalline crusts and powder, intermixed with other arsenates.

Physical Properties: Hardness = n.d. $D(\text{meas.}) = 2.28(4)$ $D(\text{calc.}) = 2.326$

Optical Properties: Semitransparent. *Color:* White. *Luster:* Pearly.
Optical Class: Biaxial (+) (synthetic). *Orientation:* $X = b$; $Y = a$; $Z = c$. $\alpha = 1.531(2)$
 $\beta = 1.546(2)$ $\gamma = 1.562(2)$ $2V(\text{meas.}) = \text{n.d.}$ $2V(\text{calc.}) = 80^\circ$

Cell Data: *Space Group:* $Pbca$ (synthetic). $a = 7.472(1)$ $b = 10.891(1)$ $c = 16.585(5)$
 $Z = 8$

X-ray Powder Pattern: Jáchymov, Czech Republic.
 4.97 (10), 3.20 (8), 3.07 (7), 4.14 (6), 3.88 (5), 2.324 (5), 4.54 (4)

Chemistry:	(1)	(2)
As ₂ O ₅	48.1	48.63
MgO	15.6	17.06
CaO	0.9	
H ₂ O	[35.4]	34.31
Total	[100.0]	100.00

(1) Jáchymov, Czech Republic; H₂O by difference, corresponds to (Mg_{0.92}Ca_{0.04})_{Σ=0.96} AsO₃OH•3.70H₂O. (2) Mg(AsO₃OH)•4H₂O.

Occurrence: A rare reaction product of arsenic-rich solutions with Ca–Mg carbonates.

Association: Pharmacolite, micropharmacolite, weilite, haidingerite, rauenthalite, arsenic, realgar, dolomite.

Distribution: From Jáchymov (Joachimsthal), Czech Republic. At Bieber and Richelsdorf, Hesse, and Wittichen, Black Forest, Germany. In the Ruben mine, Kohlendorf, Nowa Ruda (Neurode), Silesia, Poland. From the Salsigne mine, 15 km north of Carcassone, Aude, France.

Name: Honoring Rêjane Brasse, who first synthesized the compound.

Type Material: National School of Mines, Paris, France, 1963.

References: (1) Fontan, F., M. Orliac, F. Permingeat, R. Pierrot, and R. Stahl (1973) La brassite, MgHAsO₄•4H₂O, une nouvelle espèce minérale. Bull. Soc. fr. Minéral., 96, 365–370 (in French with English abs.). (2) (1975) Amer. Mineral., 60, 945 (abs. ref. 1). (3) Protas, J. and R. Gindt (1976) Structure cristalline de la brassite, MgHAsO₄•4H₂O, produit de déshydratation de la roesslérine. Acta Cryst., 32, 1460–1466 (in French with English abs.).