

Crystal Data: Amorphous. *Point Group:* n.d. As earthy masses, crusts, massive; commonly as stains and admixtures with other minerals.

Physical Properties: Hardness = n.d. $D(\text{meas.}) = \text{n.d.}$ $D(\text{calc.}) = \text{n.d.}$ Solublizes in H_2O giving a deep molybdenum-blue solution.

Optical Properties: Translucent. *Color:* Black, bluish black, blue. *Streak:* Pale blue.
Optical Class: n.d. $n = \text{n.d.}$

Cell Data: *Space Group:* n.d. $Z = \text{n.d.}$

X-ray Powder Pattern: n.d.

Chemistry: Adequate analyses of natural material are not available, usually being of mixtures. The mineral is thought to be identical with synthetic molybdic oxide.

Occurrence: A secondary mineral formed by the oxidation of molybdenum-bearing minerals.

Association: Jordisite, molybdenite, molybdite, wulfenite, melanterite, halotrichite, gypsum, oxidized uranium minerals.

Distribution: In Austria, at Bleiberg, Carinthia. Other localities noted for material seemingly meeting the properties characterizing the species include: from the Himmelsfürst mine, Erbsdorf, near Freiberg, Saxony, Germany. In the USA, at Marysvale, Ohio district, Piute Co., Utah; from the Kiggins mine, about 80 km southeast of Portland, Clackamas Co., Oregon; at Quinn Draw, Shannon Co., and in the Runge mine, about 10 km north of Edgemont, Fall River Co., South Dakota; about six km west of Gibson, Shasta Co., and in the Kern River Canyon district, Kern Co., California. From Cripple Creek, Teller Co., Northgate, Jackson Co., the Placerville district, San Miguel Co., and a number of other places in Colorado; at Poison Spring, Esmeralda Co., and in the Getchell mine, Humboldt Co., Nevada; in the Monument Valley No. 2 mine, Monument Valley, Apache Co., from the Cameron area, Coconino Co., and elsewhere in Arizona. In the Merced mine, Sierra de Berejillo, Durango, Mexico. From Kingsgate, New South Wales, Australia.

Name: Honors Johann Christoph Ilseemann (1727–1822), Mining Commissioner at Clausthal, Germany, for his studies on molybdenite.

References: (1) Palache, C., H. Berman, and C. Frondel (1944) Dana's system of mineralogy, (7th edition), v. I, 603–604. (2) Staples, L.W. (1951) Ilseemannite and jordisite. *Amer. Mineral.*, 36, 609–614.