Bunsenite

Crystal Data: Cubic. Point Group: 4/m 3 2/m. Crystals minute octahedra, may be modified by the cube or dodecahedron. Twinning: Observed.

Physical Properties: Hardness = 5.5  D(meas.) = 6.898  D(calc.) = 6.806


Cell Data: Space Group: Fm3m (synthetic). a = 4.1769  Z = 4

X-ray Powder Pattern: Synthetic. 2.088 (100), 2.410 (91), 1.476 (57), 0.9838 (21), 0.8517 (17), 1.259 (16), 1.206 (13)

Chemistry: Analyses of natural material are lacking.

Mineral Group: Periclase group.

Occurrence: In a hydrothermal Ni–U vein (Johanngeorgenstadt, Germany); in a small tabular nickel deposit at the contact between quartzite and serpentinized ultramafics; it apparently formed at ~730 °C and < 2 kbar during thermal metamorphism, possibly of a nickel-rich meteorite (Bon Accord, South Africa).

Association: Bismuth, annabergite, aerugite, xanthiosite (Johanngeorgenstadt, Germany); liebenbergite, trevorite, nickeloan serpentine, nickeloan ludwigite, violarite, millerite, gaspéite, nimite, bonaccordite (Bon Accord, South Africa).

Distribution: At Johanngeorgenstadt, Saxony, Germany. From three km west of the Scotia Talc mine, Bon Accord, Barberton district, Transvaal, South Africa. From Kambalda, 56 km south of Kalgoorlie, Western Australia.

Name: For Professor Robert William Eberhard Bunsen (1811–1899), German chemist of the University of Heidelberg, Heidelberg, Germany, who had observed artificial NiO.

Type Material: n.d.