

Crystal Data: Tetragonal. *Point Group:* $4/m\ 2/m\ 2/m$. Short prismatic crystals, to 5 cm, with prominent {010}, {011}, {110}, may be flattened, pyramidal; fibrous, radial, spherulitic, in aggregates. *Twinning:* On {011}.

Physical Properties: *Cleavage:* Perfect on {010} and {110}. *Fracture:* Conchoidal. *Tenacity:* Brittle. Hardness = 5–5.5 $D(\text{meas.}) = 3.15$ $D(\text{calc.}) = 3.08$ Very slightly soluble in H₂O.

Optical Properties: Transparent. *Color:* Colorless to white; colorless in transmitted light. *Luster:* Vitreous. *Optical Class:* Uniaxial (+). $\omega = 1.378$ $\epsilon = 1.390$

Cell Data: *Space Group:* $P4_2/mnm$ (synthetic). $a = 4.6213(1)$ $c = 3.0519(1)$ $Z = 2$

X-ray Powder Pattern: Synthetic.
3.275 (100), 2.231 (95), 1.711 (75), 2.067 (35), 1.375 (35), 1.635 (30), 2.545 (20)

Chemistry:	(1)	(2)
Mg	38.37	39.01
F	[61.63]	60.99
Total	[100.00]	100.00

(1) Gebroulaz glacier, France; F by difference. (2) MgF₂.

Occurrence: In a bituminous dolomite-anhydrite rock (Gebroulaz glacier, France); in evaporites (Bleicherode, Germany); in volcanic ejecta and fumarolic deposits (Vesuvius, Italy); in marble (Carrara, Italy); in a metamorphic magnesite deposit (Brumado mine, Brazil); in an alkalic granite (Lake Gjerdingen, Norway).

Association: Fluorite, sulfur, celestine, anhydrite, gypsum, magnesite, quartz.

Distribution: In France, in the moraine of the Gebroulaz glacier, near Moûtiers, Savoy, and in the Font Sante mine, Estrel, Var. In Germany, from Bleicherode, Harz, in the Clara mine, near Oberwolfach, Black Forest, and at Emmelberg, Eifel district. In Italy, from Carrara, Tuscany; on Vesuvius, Campania, and on Mt. Etna, Sicily. From near Lake Gjerdingen, Nordmarka, Norway. Large crystals in the Brumado mine, Bahia, Brazil. At the Huanzala mine, Huanuco, Peru. In the Rico-Argentine mine group, Rico district, Dolores Co., Colorado, USA. A few other localities have been reported but modern verification is desirable.

Name: Honors Quintino Sella (1827–1884), Italian mining engineer and mineralogist.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 37–39. (2) Bauer, W.H. (1976) Rutile-type compounds. V. Refinement of MnO₂ and MgF₂. *Acta Cryst.*, 32, 2200–2204. (3) Vidal-Valat, G., J.-P. Vidal, C.M.E. Zeyen, and K. Kurki-Suonio (1979) Neutron diffraction study of magnesium fluoride single crystals. *Acta Cryst.*, 35, 1584–1590. (4) Raade, G. and J. Haug (1981) Morphology and twinning of sellaitite from Gjerdingen, Norway. *Mineral. Record*, 12, 231–232. (5) (1955) NBS Circ. 539, 4, 33–34.