Fleisstalite $Fe^{2+}(SO_3)\cdot 3H_2O$

Crystal Data: Orthorhombic. *Point Group*: 2/*m* 2/*m* 2/*m*. As spherical aggregates of prismatic crystals to 0.5 mm, elongated along [010].

Physical Properties: *Cleavage*: *Tenacity*: *Fracture*: Hardness =
D(meas.) = D(calc.) =

Optical Properties: *Color*: Colorless. *Streak*: *Luster*:
Optical Class:

Cell Data: *Space Group*: *Pnma*. *a* = 9.554(5 *b* = 5.534(3) *c* = 9.429(5) Z = 4

X-Ray Diffraction Pattern: Kleines Fleisstal, Carinthia, Austria.
4.30 (100), 6.76 (99), 2.641 (95), 4.25 (87), 3.378 (70), 2.386 (67), 2.676 (57)

Chemistry:

Mineral Group: The Fe^{2+} equivalent of gravegliaite.

Occurrence: In an alpine cleft.

Association: Quartz, muscovite, monazite-(Ce), siderite, pyrite.

Distribution: At Mokritzen, Kleines Fleisstal, ~4 km west of Mt. Hoher Sonnblick, Carinthia, Austria.

Name: For its type locality Kleines *Fleisstal*.

Type Material: Mineralogical collection, Universalmuseum Joanneum, Graz, Austria (85.515).

References: (1) Walter, F. and H.P. Bojar (2017) Fleisstalite, $Fe^{2+}(SO_3)\cdot 3H_2O$, a new sulfite mineral species. Mitteilungen der Österreichischen Mineralogischen Gesellschaft, 163, 92 (abstract).
(2) Hålenius U, F. Hatert, M. Pasero, and S.J. Mills (2016) IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) Newsletter 33. New minerals and nomenclature modifications approved in 2016. Mineral. Mag., 80, 1136-1137.