

**Crystal Data:** Isometric. *Point Group:*  $4/m\bar{3}2/m$ . As cubo-octahedral crystals to 0.3 mm, as spherical grains to 1 mm, or as fine-grained compact massive aggregates; as pseudomorphs after prismatic lamprophyllite.

**Physical Properties:** *Cleavage:* Perfect {111}. *Fracture:* Stepped. *Tenacity:* Brittle. Hardness = 4 D(meas.) = 4.05 D(calc.) = 4.11

**Optical Properties:** Translucent. *Color:* Pale gray; colorless in transmitted light. *Streak:* White. *Luster:* Greasy. *Optical Class:* Isotropic.  $n = 1.438(2)$

**Cell Data:** *Space Group:*  $Fm\bar{3}m$ .  $a = 5.713(8)$   $Z = 4$

**X-ray Powder Pattern:** Khibiny massif, Kola Peninsula, Russia. 3.324 (100), 2.029 (90), 1.731 (60), 1.172 (50), 1.317 (30), 2.886 (20), 1.434 (20)

<b>Chemistry:</b>	(1)
Na	1.79
Ca	9.57
Sr	42.81
Ba	7.06
La	2.14
Ce	2.78
Nd	0.64
<u>F</u>	<u>33.15</u>
Total	99.94

(1) Mt. Koashva, Khibiy massif, Kola Peninsula, Russia; average of several electron microprobe analyses; corresponding to  $(\text{Sr}_{0.56}\text{Ca}_{0.27}\text{Na}_{0.09}\text{Ba}_{0.06}\text{Ce}_{0.02}\text{La}_{0.02}\text{Nd}_{0.01})_{\Sigma=1.03}\text{F}_2$ .

**Mineral Group:** Fluorite group.

**Occurrence:** In lenses of sodalite-microcline-aegirine rock within an apatite-rich urtite; produced by intense alteration of primary Sr-bearing minerals by F-rich hydrothermal fluids in a peralkaline parageneses.

**Association:** Astrophyllite, burbankite, chlorobartonite, fluorite, fluorapatite, polezhaevite-(Ce).

**Distribution:** Mt. Koashva and Mt. Kitchepakhk, Khibiny alkaline massif, Kola Peninsula, Russia.

**Name:** As a Sr-dominant analogue of fluorite.

**Type Material:** Mineralogical Museum, St. Petersburg State University, Russia; Geological and Mineralogical Museum of the Geological Institute, Kola Science Center, Russian Academy of Sciences, Apatity, Russia (6455).

**References:** (1) Yakovenchuk, V.N., G.Y. Ivanyuk, Y.A. Pakhomovsky, E.A. Selivanova, J.A. Korchak, and A.P. Nikolaev (2010) Strontiofluorite, SrF<sub>2</sub>, a new mineral species from the Khibiny Massif, Kola Peninsula, Russia. *Can. Mineral.*, 48, 1487-1492. (2) (2013) *Amer. Mineral.*, 98, 281-282 (abs. ref. 1).