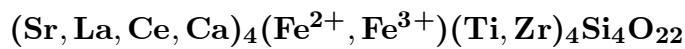


Strontiochevkinite

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Crystal Data: Monoclinic. *Point Group:* 2/m. As rounded grains, up to 1.5 mm.
Twinning: Thick parallel or interpenetrating twins seen in polished section.

Physical Properties: Hardness = ~5 D(meas.) = n.d. D(calc.) = 5.44

Optical Properties: Opaque. *Color:* Flesh-pink; dark gray in reflected light, may show deep red internal reflections. *Luster:* Submetallic. *Anisotropism:* Strong, in shades of gray.

Cell Data: *Space Group:* $P2_1/a$. $a = 13.56$ $b = 5.70$ $c = 11.10$ $\beta = 100.32^\circ$ $Z = 2$

X-ray Powder Pattern: Near Sarambi, Paraguay.

3.01 (100), 1.97 (75), 2.19 (70), 2.51 (40), 2.73 (30), 2.85 (25), 3.21 (10)

Chemistry:

| | (1) | | (1) |
|--------------------------------|-------|--------------------------------|--------|
| SiO ₂ | 20.45 | Cr ₂ O ₃ | 0.04 |
| TiO ₂ | 23.16 | FeO | 6.02 |
| ZrO ₂ | 10.30 | MnO | 0.08 |
| Al ₂ O ₃ | 0.11 | CaO | 2.05 |
| Y ₂ O ₃ | 0.05 | SrO | 19.60 |
| La ₂ O ₃ | 9.18 | BaO | 0.38 |
| Ce ₂ O ₃ | 9.35 | Na ₂ O | 0.02 |
| RE ₂ O ₃ | 0.05 | Total | 100.84 |

(1) Near Sarambi, Paraguay; UO₂, ThO₂, Nb₂O₅, PbO, MgO, K₂O, all < 0.01%; corresponds to (Sr_{2.17}Ce_{0.66}La_{0.65}Ca_{0.42}Ba_{0.03}Na_{0.01})_{Σ=3.94}(Fe_{0.96}²⁺Mn_{0.01})_{Σ=0.97}(Ti_{3.26}Zr_{0.96}Al_{0.03}Cr_{0.01})_{Σ=4.26}Si_{3.91}O₂₂.

Occurrence: In the more mafic bands of fenite dikes formed radially around carbonatite plugs.

Association: Sanidine, aegirine, nepheline, hematite, zeolites, strontian loparite, lamprophyllite.

Distribution: In the Sarambi carbonatite complex, about 27 km northeast of Sarambi, Paraguay.

Name: For the *strontium* content and relation to *chevkinite*.

Type Material: The Natural History Museum, London, England, 1984,482; National Museum of Natural History, Washington, D.C., USA, 161154.

References: (1) Haggerty, S.E. and A.N. Mariano (1983) Strontian-loparite and strontio-chevkinite: two new minerals in rheomorphic fenites from the Paraná basin carbonatites, South America. *Contr. Mineral. Petrol.*, 84, 365–381. (2) (1984) *Amer. Mineral.*, 69, 1192–1193 (abs. ref. 1).