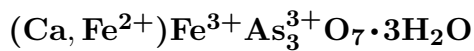


Lazarenkoite



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Crystal Data: Orthorhombic, pseudohexagonal. *Point Group:* n.d. As fibrous crystals, in incrustations.

Physical Properties: Hardness = 1 D(meas.) = 3.450(5) D(calc.) = 3.59

Optical Properties: Semitransparent. *Color:* Bright orange. *Luster:* Resinous to silky. *Optical Class:* Biaxial (-). *Pleochroism:* Strong; X = pale yellow; Y = pale brown; Z = rose-brown. $\alpha = 1.820(3)$ $\beta = 1.920(3)$ $\gamma = 1.955(3)$ $2V(\text{meas.}) = \sim 30^\circ$

Cell Data: *Space Group:* n.d. $a = 21.80$ $b = 12.64$ $c = 8.40$ $Z = 10$

X-ray Powder Pattern: Khovu-Aksy deposit, Russia.

8.40 (10), 11.2 (9), 4.66 (9), 6.55 (8), 3.31 (4), 3.20 (4), 3.135 (4)

Chemistry:

| | |
|--------------------------------|-------|
| | (1) |
| Fe ₂ O ₃ | 16.7 |
| As ₂ O ₃ | 61.5 |
| FeO | 5.6 |
| MgO | 0.7 |
| CaO | 5.1 |
| H ₂ O | 12.2 |
| <hr/> | |
| Total | 101.8 |

(1) Khovu-Aksy deposit, Russia; average of two analyses, absence of arsenate and arsenite and presence of H₂O shown by IR; corresponding to $(\text{Ca}_{0.44}\text{Fe}_{0.38}^{2+}\text{Mg}_{0.09})_{\Sigma=0.91}\text{Fe}_{1.02}^{3+}\text{As}_{3.04}^{3+}\text{O}_7 \cdot 3.32\text{H}_2\text{O}$.

Occurrence: In the oxidation zone of a metallic ore deposit.

Association: Annabergite, skutterudite, löllingite.

Distribution: From the Khovu-Aksy Ni-Co deposit, Tuva, Siberia, Russia.

Name: Honors Academician Evgenii Konstantinovich Lazarenko (1912–1979), mineralogist, Lvov University, Lvov, Ukraine.

Type Material: Mining Institute, St. Petersburg, 1263/1; A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 81172.

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