

Crystal Data: Hexagonal. *Point Group:* 6/m 2/m 2/m. As euhedral tabular {0001} hexagonal crystals to 15 mm.

Physical Properties: *Cleavage:* Poor on {0001}. *Tenacity:* Brittle. *Fracture:* Irregular to conchoidal. Hardness = 6 D(meas.) = 2.67(8) D(calc.) = 2.66(4) Nonfluorescent.

Optical Properties: Transparent. *Color:* Very strong dichroism: cobalt blue and green-yellow observed along [0001] and [1000], respectively; colorless in thin section. *Streak:* Light blue.

Luster: Vitreous.

Optical Class: Uniaxial (+). $\omega = 1.540(2)$ $\varepsilon = 1.545(3)$

Cell Data: *Space Group:* P6/mcc. $a = 9.95343(6)$, $c = 14.15583(8)$ Z = 2

X-Ray Diffraction Pattern: Betroka, Ihorombe region, Fianarantsoa Province, Madagascar. 3.171 (100), 4.064 (80), 2.881 (80), 4.965 (60), 2.372 (40), 3.533 (30), 7.055 (20)

Chemistry:	(1)	(2)	(1)	(2)
Al ₂ O ₃	3.11	5.37	MgO	4.01
SiO ₂	73.10	75.92	ZnO	8.49
Sc ₂ O ₃	3.78		CaO	0.04
Y ₂ O ₃	0.22		BaO	0.07
TiO ₂	0.02		BeO	0.16
FeO	2.69		Na ₂ O	5.27
Fe ₂ O ₃	[0.19]		K ₂ O	0.15
MnO	1.91		Total	4.30
				4.96
				99.77
				100.00

(1) Betroka, Ihorombe region, Fianarantsoa Province, southern Madagascar; average electron microprobe and several spectroscopies (inductively coupled plasma, optical emission, mass, and Mössbauer); corresponds to $(\text{Mg}_{0.86}\text{Sc}_{0.54}\text{Fe}^{2+}_{0.35}\text{Mn}_{0.26})_{\Sigma=2.01}(\text{K}_{0.89}\text{Na}_{0.05}\text{Y}_{0.02}\text{Ca}_{0.01}\text{Ba}_{0.01})_{\Sigma=0.98}[(\text{Be}_{2.35}\text{Al}_{0.50}\text{Mg}_{0.11}\text{Fe}^{3+}_{0.03})_{\Sigma=2.99}(\text{Si}_{11.90}\text{Al}_{0.10})\text{O}_{30}]$. (2) Mg₂K(Be₂Al)Si₁₂O₃₀.

Mineral Group: Milarite group.

Occurrence: In quartz-syenite pegmatites in a series of biotite- and amphibole-rich gneisses, migmatites, and pyroxene-rich alkali syenites.

Association: Orthoclase, quartz, apatite, phenakite, beryl, albite, magnetite, thortveitite, cheralite.

Distribution: From ~80 km northeast of Betroka, Ihorombe region, Fianarantsoa Province, southern Madagascar.

Name: Honors Laurent Thomas (b. 1971), French geologist, prospector, and mineral dealer since the early 1990s, especially for African areas such as Madagascar. He first brought to public knowledge species from Madagascar such as pezzottaite from Mandrosonoro, grandierite from Tranomaro, euclase from Itasy, and chrysoberyl from Tsitondroina.

Type Material: Natural History Museum, Paris, France (MNHN_MIN_218.1_a holotype; 218.1_b and 218.1_c cotypes).

References: (1) Ferraris, C., I. Pignatelli, F. Cámara, G. Parodi, S. Pont, M. Schreyer, and F. Wei (2020) Laurentthomasite, Mg₂K(Be₂Al)Si₁₂O₃₀: a new milarite-group-type member from the Ihorombe region, Fianarantsoa Province, Madagascar. Eur. J. Mineral., 32(3), 355-365.