Darapiozite $KNa_2Li(Mn,Zn)_2ZrSi_{12}O_{30}$

Crystal Data: Hexagonal. *Point Group:* $6/m\ 2/m\ 2/m$ (probable). As masses, to 5 cm.

Physical Properties: Hardness = 5 D(meas.) = 2.92 D(calc.) = 2.80

Optical Properties: Semitransparent. *Color:* Colorless, white, rarely brownish or pale to deep blue.
Optical Class: Uniaxial (–). *Pleochroism:* O = violet; E = blue. $\omega = 1.580(2)$ $\epsilon = 1.575(2)$

Cell Data: *Space Group:* $P6/mcc$ (probable). $a = 10.32$ $c = 14.39$ Z = 2

X-ray Powder Pattern: Dara-i-Pioz massif, Tajikistan.
3.26 (100), 2.93 (65), 7.09 (60), 2.56 (55), 4.13 (50), 2.76 (45), 4.43 (40)

Chemistry:

	(1)
SiO_2	63.65
ZrO_2	5.00
RE_2O_3	0.96
Fe_2O_3	1.85
Nb_2O_5	0.90
MnO	8.25
ZnO	7.85
CaO	0.57
Li_2O	1.74
Na_2O	2.96
K_2O	5.14
LOI	0.58
Total	99.45

(1) Dara-i-Pioz massif, Tajikistan; corresponds to $K_{1.23}(Na_{1.08}Li_{0.58}Ca_{0.11})_{\Sigma=1.77}Li_{0.73}(Mn_{1.31}Zn_{1.10})_{\Sigma=2.41}(Zr_{0.46}Fe_{0.26}Nb_{0.07})_{\Sigma=0.79}Si_{12}[O,(OH)]_{30}$.

Mineral Group: Milarite group.

Occurrence: In an alkalic massif.

Association: Aegirine, quartz, sogdianite, eudialyte, manganoan pectolite, polylithionite.

Distribution: In the Dara-i-Pioz massif, Alai Range, Tien Shan, Tajikistan.

Name: For the occurrence in the Dara-i-Pioz massif, Tajikistan.

Type Material: Mineralogical Museum, St. Petersburg University, St. Petersburg; Institute of Mineralogy and Geochemistry of Rare Elements, Moscow; A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 76078.

References: (1) Semenov, E.I., V.D. Dusmatov, A.P. Khomyakov, A.A. Voronkov, and M.E. Kazakova (1975) Darapiosite [darapiozite], a new mineral of the milarite group. Zap. Vses. Mineral. Obshch., 104, 583–585 (in Russian). (2) (1976) Amer. Mineral., 61, 1053–1054 (abs. ref. 1).