

**Crystal Data:** Orthorhombic. *Point Group:* 2/m 2/m 2/m. As equant grains to 0.2 mm.

**Physical Properties:** *Cleavage:* None. *Fracture:* Uneven. *Tenacity:* Brittle. Hardness = 6.5-7 VHN = 953 (100 g load). D(meas.) = 3.35(2) D(calc.) = 3.36

**Optical Properties:** Transparent to translucent. *Color:* White to colorless. *Streak:* White.

*Luster:* Vitreous, slightly greasy.

*Optical Class:* Biaxial (-).  $\alpha = 1.597(2)$   $\beta(\text{calc}) = 1.627(2)$   $\gamma = 1.632(2)$   $2V(\text{meas}) = 43(3)^\circ$   $2V(\text{calc}) = \text{n.d.}$  *Dispersion:* Moderate,  $v > r$ . *Pleochroism:* None.

**Cell Data:** *Space Group:* Pnma.  $a = 8.155(2)$   $b = 7.919(1)$   $c = 8.921(1)$   $Z = 4$

**X-ray Powder Pattern:** Dara-i-Pioz glacier, Alai mountain range, Tien Shan, northern Tajikistan. 3.62 (100), 3.51 (90), 2.786 (90), 3.31 (80), 1.982 (70B), 5.94 (60), 3.01 (60)

<b>Chemistry:</b>	(1)
CaO	0.38
SrO	34.15
B <sub>2</sub> O <sub>3</sub>	23.39
<u>SiO<sub>2</sub></u>	<u>41.56</u>
Total	99.48

(1) Dara-i-Pioz glacier, Alai mountain range, Tien Shan, northern Tajikistan; electron microprobe analysis, corresponding to (Sr<sub>0.97</sub>Ca<sub>0.02</sub>)<sub>Σ=0.99</sub>B<sub>1.97</sub>Si<sub>2.02</sub>O<sub>8</sub>.

**Occurrence:** Within a block of quartz in the moraine of the Dara-i-Pioz glacier, Alai mountain range, Tien Shan, northern Tajikistan. The Dara-i-Pioz massif at the head of the glacier contains B-rich alkaline rocks and pegmatites.

**Association:** In quartz, intergrown with pectolite, highly strontian fluorite, and aegirine.

**Distribution:** Dara-i-Pioz glacier, Alai mountain range, Tien Shan, northern Tajikistan.

**Name:** Honors Russian mineralogist Igor Viktorovich Pekov (b. 1967), an expert on the mineralogy of alkaline rocks.

**Type Material:** A.E. Fersman Mineralogical Museum, Moscow, Russia.

**References:** (1) Pautov, L.A., A.A. Agakhanov, E. Sokolova, and F.C. Hawthorne (2004) Maleevite, BaB<sub>2</sub>Si<sub>2</sub>O<sub>8</sub>, and pekovite, SrB<sub>2</sub>Si<sub>2</sub>O<sub>8</sub>, new mineral species from the Dara-i-Pioz alkaline massif, northern Tajikistan: description and crystal structure. *Can. Mineral.*, 42, 107–119. (2) (2005) *Amer. Mineral.*, 90, 272-273 (abs. ref. 1).