

Crystal Data: Tetragonal. *Point Group:* 4/m 2/m 2/m. Typically as fibrous “wool-like” aggregates, to 2 cm; also as aggregates of acicular crystals with tetragonal or octagonal cross-sections, to 1 cm. Crystals elongate parallel to [100] with forms {100} and {100}.

Physical Properties: *Cleavage:* None. *Tenacity:* Brittle (acicular), flexible (fibrous). *Fracture:* Splintery. Hardness = n.d. D(meas.) = n.d. D(calc.) = 1.82 to 2.06 (respectively for less and greater hydration, readily reversible). Weak effervescence in HCL. Readily hygroscopic.

Optical Properties: Transparent. *Color:* Colorless fibers, aggregates snow-white to pearl white. *Streak:* White. *Luster:* Silky. *Optical Class:* Uniaxial (+). $\omega = 1.469(1)$ $\varepsilon = 1.502(1)$

Cell Data: *Space Group:* P4/mcc. $a = 13.1304(19)$ $c = 5.4189(11)$ $Z = 8$

X-ray Powder Pattern: Poudrette Quarry, Mont-Saint Hilaire, Quebec, Canada. 13.01 (100), 3.256 (95), 9.20 (62), 2.489 (60), 2.693 (44), 2.605 (37), 3.611 (34)

Chemistry:	(1)
Na ₂ O	19.81
K ₂ O	0.07
CaO	3.88
BeO	16.65
CO ₂	29.81
<u>H₂O</u>	<u>26.93</u>
Total	97.15

(1) Poudrette Quarry, Mont-Saint Hilaire, Quebec, Canada; multiple analyses by electron microprobe, ICP-OES and LOI, H₂O calculated, OH:H₂O by charge balance, OH, H₂O, CO₃ confirmed by IR; corresponding to (Na_{0.94}Ca_{0.10})_{Σ=1.04}Be_{0.98}(CO₃)_{1.00}(OH)_{1.10}·1.66H₂O.

Occurrence: A late stage mineral in cavities in the core of a hydrothermally altered peralkaline pegmatite.

Association: Albite, aegirine, natrolite, gonnardite, siderite, petersenite-(Ce), franconite, dawsonite; more rarely analcime, quartz, eudidymite, catapleiite, gaidonnayite, monazite-(Ce), calcite, adamsite-(Y), shomiokite-(Y), galena, sphalerite, rutile.

Distribution: Poudrette Pegmatite, Poudrette Quarry, Mont-Saint Hilaire, Quebec, Canada.

Name: From the Latin *niveus*, snow white, and *lana*, wool, in allusion to the typical habit.

Type Material: A.E. Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, 3631/1, and the Canadian Museum of Nature, Ottawa, CNMMC 86052.

References: (1) Pekov, I.V., N.V. Zubkova, N.V. Chukanov, A.A. Agakhanov, D.I. Belakovskiy, L. Horváth, Y.E. Filinchuk, E.R. Gobechiya, D.Y. Pushcharovsky, and M.K. Rabadanov (2008) Niveolanite, the first natural beryllium carbonate, a new mineral species from Mont Saint-Hilaire, Quebec, Canada. *Can. Mineral.*, 46, 1343–1354. (2) (2009) *Amer. Mineral.*, 94, 1080-1081 (abs. ref. 1).