NEW MINERAL NAMES

Glaucocerinite


NAME: From the Greek words for blue and waxy.

Chemical Properties: A hydrous basic sulfate of zinc, aluminum and copper: $\text{Zn}_3\text{Al}_3\text{Cu}_3(\text{SO}_4)_3\text{O}_9\cdot 34\text{H}_2\text{O}$. Analysis: ZnO 37.95, Al$_2$O$_3$ 15.40, CuO 19.26, SO$_3$ 5.79, H$_2$O$+5.69$, H$_2$O$-16.31$; Sum 100.40. Soluble en hydrochloric acid.

Physical and Optical Properties: Color sky blue to turquoise blue, at times greenish, and gray or brownish through impurities. Soft, waxy to radial fibrous. Sp. Gr. 2.749.

Extinction parallel. $\gamma = 1.542 \pm 0.001$. Birefringence is high.

OCCURRENCE: Found as a fine botryoidal coating on adamite or with gypsum in vugs in smithsonite at Laurion.

DISCUSSION: Differs from zinkaluminite chiefly in its content of copper.

W. F. Foshag

Alkanasul


NAME: From the chemical symbols of its constituents, aluminum, potassium and sodium, and the first syllable of sulfate.

Chemical Properties: A basic sulfate of aluminum, potassium and sodium: $\text{K}_2\text{SO}_4\cdot \text{Na}_2\text{SO}_4\cdot 2(\text{Al}_2\text{SO}_4)\cdot 6\text{Al(OH)}_3\cdot 6\text{H}_2\text{O}$. Analysis: Al$_2$O$_3$ 30.35; K$_2$O 5.61; Na$_2$O 3.70; SO$_3$ 37.95; H$_2$O 16.11; Fe$_2$O$_3$ 1.20; SiO$_2$ 4.98. Insoluble in water or acids. After moderate roasting yields soluble sulfates of alumina, potassium and sodium.

Physical Properties: Color yellowish white to bluish gray. Hd. 4$. Sp. Gr. 2.90.

Found in large quantity, in compact masses or sandy conglomeratic masses, near Salamanca, Chile.

W. F. Foshag

Leucophosphate


NAME: From the Greek leukos, white; phosphoros, the root of phosphate.

Chemical Properties: A hydrous phosphate of potash, iron and aluminum: $\text{K}_2(\text{Fe}, \text{Al})_2(\text{OH})_8(\text{PO}_4)\cdot 6\text{H}_2\text{O}$. Analysis (after deducting 52.75% quartz, 0.48% rutile, 1.07% chromite, and 1.03% carbon, etc.): Al$_2$O$_3$ 12.73; Fe$_2$O$_3$ 32.82; Cr$_2$O$_3$ nil; FeO nil; MnO 0.22; MgO 0.73; CaO tr.; (NH$_4$)$_2$O 0.09; Na$_2$O 0.13; K$_2$O 7.88; H$_2$O + 12.28; P$_2$O$_5$ 26.69; NiO tr.; CO$_2$ 0.17; Carbon tr.; SiO$_2$ nil; TiO$_2$ nil; H$_2$O - 6.59. Total 100.33.

Soluble in strong hydrochloric acid. Insoluble in water.

OCURRENCE: Found as chalky masses intimately associated with variscite (redondite), chalcedony and opal in veins replacing serpentine. Suggested as resulting from the action of solutions of bird guano upon the serpentine.

W.F.F.

NEW DATA

Julienite


CRYSTALLOGRAPHIC PROPERTIES: (On recrystallized mineral), tetragonal, habit slender prismatic $c = \beta = 1.2059, \alpha = 0.8292$. Forms: (010), (490), (350), (110) (111).

PHYSICAL AND OPTICAL PROPERTIES: $G = 1.594$.

Uniaxial positive. $\epsilon = 1.645, \omega = 1.556$. Feebly pleochroic. Julienite does not seem to contain chlorine nor NO$_3$ as previously reported.

W.F.F.