

Crystal Data: Cubic. *Point Group:* 23. Euhedral crystals to 20 μm display {100}, {110}, and {111}.

Physical Properties: *Cleavage:* n.d. *Fracture:* n.d. *Tenacity:* n.d. *Hardness:* = n.d. *D(calc.):* = 2.974

Optical Properties: Transparent. *Color:* Colorless to pale yellow. *Streak:* n.d. *Luster:* n.d. *Optical Class:* n.d. *n(calc.):* = 1.357

Cell Data: Space Group: *I*2₁3. *a* = 10.264(1) *Z* = 4

X-ray Powder Pattern: Hekla volcano, Iceland. 2.95 (100), 2.009 (98), 1.811 (84), 2.184 (78), 4.18 (76), 1.871 (75), 3.23 (68)

| Chemistry: | (1) | (2) |
|------------|-----|--------|
| Na | | 9.46 |
| Ca | | 24.73 |
| Al | | 11.10 |
| F | | 54.71 |
| Total | | 100.00 |

(1) SEM-EDS analyses, no weight percentage data presented; corresponds to Na_{2.01}Ca_{2.82}Al_{2.17}F_{14.02} (Eldfell) and (Na_{1.47}K_{0.09})_{Σ=1.56}Ca_{3.25}Al_{2.19}F_{14.33} (Vesuvius). (2) Na₂Ca₃Al₂F₁₄.

Occurrence: In fumarolic sublimates.

Association: Ralstonite, hieratite, knasibfite, matteuccite, avogadrite, mallardite (Vesuvius); jakobssonite, anhydrite, leonardsenite, ralstonite, jarosite, meniaylovite (Eldfell); ralstonite, hematite, jacobssonite, leonardsenite, heklaite, mallardite, opal, fluorite (Hekla).

Distribution: From Eldfell and Hekla volcanoes and fumaroles at Fimmvörduhals, Iceland and from Vesuvius volcano, Italy.

Name: Honors French author Jules Verne (1828-1905), for his promotion of science. His *Voyage au center de la Terre* (1864), describes a journey through Earth's underground started through Snæfell crater in Iceland and finished by ejecting the travelers with eruption of Stromboli in Italy.

Type Material: Icelandic Institute of Natural History, Garðabær, Iceland (NI 15509 and NI 12256) and the Department of Earth and Geo-Environmental Sciences, University of Bari, Italy.

References: (1) Balić-Žunić, T., A. Garavelli, D. Pinto, and D. Mitolo (2018) Verneite, Na₂Ca₃Al₂F₁₄, a new aluminum fluoride mineral from Icelandic and Vesuvius Fumaroles. *Minerals*, 8(12), 553. (2) (2020) *Amer. Mineral.*, 105(8), 1284 (abs. ref. 1).