Sodium alum: NaAl(SO$_4$)$_2$$\cdot$12H$_2$O

Crystal Data: Cubic. Point Group: 2/m 3. As octahedral crystals, to 1 mm.

Physical Properties: Fracture: Conchoidal. Hardness = $\sim$3 D(meas.) = 1.64 (synthetic). D(calc.) = 1.670 (synthetic). Soluble in H$_2$O.


Cell Data: Space Group: Pa3. $a = 12.214(1)$ Z = 4

X-ray Powder Pattern: Synthetic. 4.314 (100), 2.962 (35), 3.526 (14), 7.05 (7), 1.9077 (7), 3.263 (6), 2.493 (6)

Chemistry: (1) There are apparently no analyses of natural material.

Occurrence: A sublimate on burning coal heaps (Bátonyterenye, Hungary); a recent precipitate (Recsk mine, Hungary).

Association: Blödite, kröhnkite (Recsk mine, Hungary).

Distribution: Earlier reported localities require confirmation by modern methods. Recently identified in Hungary, from the Recsk copper mine, Mátra Mountains, and at Bátonyterenye.

Name: For its sodium content, and as a hydrated aluminum sulfate.

Type Material: n.d.