Flagstaffite $C_{10}H_{20}O_2 \cdot H_2O$

Crystal Data: Orthorhombic. *Point Group:* $mm2$. Prismatic crystals display {110} and {111}, with minor {101} {131}, and {100}, to 1 mm; typically as drusy incrustations.

Physical Properties: *Cleavage:* {110}, imperfect. Hardness = "Soft". D(meas.) = 1.09 D(calc.) = 1.10 Strongly pyroelectric; M.P. 116 °C.

Optical Properties: Transparent. *Color:* Colorless.
Optical Class: Biaxial (+). *Orientation:* $X = c$; $Z = a$. *Dispersion:* $r > v$. $\alpha = 1.505$ $\beta = 1.512$ $\gamma = 1.524$ 2V(meas.) = 77°

Cell Data: *Space Group:* $Fdd2$. $a = 18.60$ $b = 23.00$ $c = 10.86$ Z = 16

X-ray Powder Pattern: Synthetic. (ICDD 28-2014).
4.88 (100B), 8.72 (80), 7.16 (80), 4.36 (60), 5.89 (50), 5.65 (50), 4.73 (50)

Chemistry:

	(1)	(2)
C	66.21	63.12
H	11.55	11.65
O	22.24	25.23
Total	100.00	100.00

(1) San Francisco Peaks, Arizona, USA; corresponding to $C_{10.0}H_{20.7}O_{2.5}$. (2) $C_{10}H_{20}O_2 \cdot H_2O$.

Occurrence: Lining cracks in decomposing buried pine logs.

Association: n.d.

Distribution: At the base of the San Francisco Peaks, north of Flagstaff, Coconino Co., Arizona, USA.

Name: For Flagstaff, Arizona, USA, near the type locality.

Type Material: n.d.

References: (1) Guild, F.N. (1920) Flagstaffite, a new mineral from Arizona. Amer. Mineral., 5, 169–172. (2) Guild, F.N. (1921) The identity of flagstaffite and terpin hydrate. Amer. Mineral., 6, 133–134. (3) Strunz, H. and B. Contag (1965) Evenkit, Flagstaffit, Idrialin und Reficit. Neues Jahrb. Mineral., Monatsh., 19–25 (in German).