

Crystal Data: Hexagonal. *Point Group:* $\bar{3}$. As euhedral to subhedral crystals elongated || [0001], to 0.4 mm, showing hexagonal cross sections, and with {0001} and {10 $\bar{1}$ 0}.

Physical Properties: *Cleavage:* {10 $\bar{1}$ 0}, imperfect, suspected. *Fracture:* Conchoidal. *Tenacity:* Brittle. Hardness = n.d. D(meas.) = 2.65(3) D(calc.) = 2.58(2)

Optical Properties: Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Uniaxial (+). $\omega = 1.596(2)$ $\epsilon = 1.604(2)$

Cell Data: *Space Group:* $[P\bar{3}]$ (by analogy to synthetic $\text{Ca}_6\text{Si}_2\text{O}_7(\text{OH})_6$). $a = 10.026(5)$
 $c = 7.482(4)$ $Z = 2$

X-ray Powder Pattern: Kombat mine, Namibia.

8.66 (100), 2.996 (90), 2.833 (90), 2.887 (70), 3.279 (50), 2.466 (30), 2.083 (30)

Chemistry:

	(1)
SiO ₂	23.96
CaO	64.98
H ₂ O	[11.06]
Total	[100.00]

(1) Kombat mine, Namibia; by electron microprobe, average of three analyses, includes Mn and Cl < 0.1%, H₂O by difference; corresponds to $\text{Ca}_{5.86}\text{Si}_{2.02}\text{O}_{13}\text{H}_{6.21}$.

Occurrence: Closely associated with or enclosed by defernite within low-grade metamorphic rocks.

Association: Defernite, hausmannite, apatite, brucite, hillebrandite, vesuvianite, glaucochroite, galena, copper.

Distribution: At the Kombat mine, 49 km south of Tsumeb, Namibia.

Name: In honor of Professor Howard W. Jaffe of the University of Massachusetts, Amherst, Massachusetts, USA.

Type Material: Museum of Natural History, Geneva, Switzerland, 500/32; National Museum of Natural History, Washington, D.C., USA, 163802.

References: (1) Sarp, H. and D.R. Peacor (1989) Jaffeite, a new hydrated calcium silicate from the Kombat mine, Namibia. Amer. Mineral., 74, 1203–1206.