

Crystal Data: Orthorhombic. *Point Group:* $2/m\ 2/m\ 2/m$ or $mm2$. As flakes or as rosettes of thin, sometimes bent, tabular crystals, to 1 cm; forms observed include {010}, {201}, {100}.

Physical Properties: *Cleavage:* Perfect, micaceous, on {010}. *Hardness* = 1
D(meas.) = 2.843 *D*(calc.) = 2.849

Optical Properties: *Translucent.* *Color:* Yellow to greenish yellow. *Streak:* Yellow.
Luster: Silky in aggregates, vitreous.

Optical Class: Biaxial (-) (?). *Orientation:* $X = b; Y = a; Z = c$. *Dispersion:* $r < v$, strong.
 $\alpha = \text{n.d.}$ $\beta = 1.658$ $\gamma = 1.664$ $2V(\text{meas.}) = \sim 60^\circ$

Cell Data: *Space Group:* $Pcmm$, $Pcm2_1$, or $Pc2m$. $a = 11.98(8)$ $b = 20.37(10)$
 $c = 9.95(8)$ $Z = 2$

X-ray Powder Pattern: Hagendorf, Germany.
 9.96 (10b), 5.09 (5), 3.37 (5), 3.30 (5), 3.79 (4), 4.91 (3), 3.08 (3)

Chemistry:

	(1)	(2)
P_2O_5	31.0	30.64
Al_2O_3	0.08	
Fe_2O_3	28.4	30.64
MnO	2.80	
ZnO	14.6	15.62
MgO	0.06	
CaO	5.89	5.38
Na_2O	0.04	
K_2O	0.01	
H_2O^+	8.70	
H_2O^-	9.10	
H_2O		17.72
Total	100.68	100.00

(1) Hagendorf, Germany; corresponds to $\text{Ca}_{2.18}\text{Zn}_{3.71}\text{Mn}_{0.82}^{2+}\text{Fe}_{7.35}^{3+}(\text{PO}_4)_{9.03}(\text{OH})_9 \cdot 16\text{H}_2\text{O}$.

(2) $\text{Ca}_2\text{Zn}_4\text{Fe}_8(\text{PO}_4)_9(\text{OH})_9 \cdot 16\text{H}_2\text{O}$.

Occurrence: A late-forming mineral in a complex granite pegmatite.

Association: Mitridatite, manganese oxides.

Distribution: From Hagendorf, Bavaria, Germany.

Name: Honors Dr. Gerhard Jung, Albbbruck, Germany, who found the first specimen.

Type Material: n.d.

References: (1) Moore, P.B. and J. Ito (1980) Jungit und Matulait: Zwei neue tafelige phosphat-mineralien. *Aufschluss*, 31, 55-61 (in German with English abs.). (2) (1980) *Amer. Mineral.*, 65, 1067 (abs. ref. 1). (3) (1981) *Amer. Mineral.*, 66, 1280 (correction).