Crystal Data: Monoclinic. *Point Group*: 2/*m*. As blocky to thin, lath-like crystals to 0.5 mm elongated along [010] and flattened on {001}, displaying {001}, {031}, and {201}. Aggregates form fans or rosettes.

Physical Properties: *Cleavage*: None. *Tenacity*: Brittle. *Fracture*: Irregular. Hardness = 2.5 D(meas.) = 2.95(2) D(calc.) = 2.907 Nonfluorescent.

Optical Properties: Transparent to translucent. *Color*: Pale green, bluish green, or grayish green. *Streak*: White with a pale green tint. *Luster*: Vitreous, sometimes pearly.
Optical Class: Biaxial (-). $\alpha = 1.576(2)$ $\beta = 1.617(2)$ $\gamma = 1.630(2)$ 2V(meas.) = 58(4)° 2V(calc.) = 57.5° *Dispersion*: Weak, $r > v$. *Orientation*: $X = b$, $Y = c$, $Z \approx a$.
Pleochroism: Strong, X = colorless, Y = green, Z = pale green.

Cell Data: *Space Group: $P2_1/c$*. $a = 5.599(1)$ $b = 6.084(1)$ $c = 23.676(5)$ $\beta = 95.22(3)°$ Z = 2

X-Ray Diffraction Pattern: Cap Garonne mine, Var, Provence-Alpes-Côte d'Azur, France.
11.870 (100), 5.924 (40), 2.663 (20), 4.825 (15), 3.946 (15), 2.956 (15), 2.561 (15)

Chemistry:

	(1)	(2)
CuO	42.45	44.48
CoO	6.58	10.47
NiO	3.37	
ZnO	3.14	
SO_3	22.12	22.38
H_2O	[22.62]	22.67
Total	100.30	100.00

(1) Cap Garonne mine, Var, Provence-Alpes-Côte d'Azur, France; average electron microprobe analysis, H_2O calculated from structure; corresponds to $(Co_{0.63}Ni_{0.32}Zn_{0.28}Cu_{3.83})_{\Sigma=5.06}S_{1.98}O_{20}H_{18.00}$.
(2) $CoCu_4(SO_4)_2(OH)_6{\cdot}6H_2O$.

Polymorphism & Series: Complete solid-solution series between ktenasite and gobelinite.

Mineral Group: Ktenasite group.

Occurrence: From the weathering of cobaltite-gersdorffite and nearby tennantite under acidic conditions.

Association: Brochantite, cerussite, "guarinoite", thérèsemagnanite, gordaite.

Distribution: From the Cap Garonne mine (pillar 78b in the north mine), Var, Provence-Alpes-Côte d'Azur, France (type locality), and the Schlänger und Eichert vein, Eisenzecher Zug mine, Eiserfeld, Siegerland, North Rhine-Westphalia, Germany (cotype locality).

Name: Alludes to the Old French word *gobelin*, equivalent to the German word *kobold*, from which the designation of the element cobalt was derived.

Type Material: Mineral collections, Museums Victoria, Melbourne, Victoria, Australia (M54565 Cap Garonne), and the Natural History Museum, Vienna, Austria (O 1045 Eisenzecher Zug).

References: (1) Mills, S.J., U. Kolitsch, G. Favreau, W.D. Birch, V. Galea-Clolus, and J.M. Henrich (2020) Gobelinite, the Co analogue of ktenasite from Cap Garonne, France, and Eisenzecher Zug, Germany. Eur. J. Mineral., 32, 637-644.