

Crystal Data: Tetragonal. *Point Group:* 4/m 2/m 2/m. Crystals prismatic on [001], to 0.5 mm, showing {001}, {100}.

Physical Properties: *Cleavage:* None observed; possible {100} inferred from X-ray study. *Fracture:* Uneven. *Tenacity:* Brittle. *Hardness* = ~4 *D(meas.)* = n.d. *D(calc.)* = 4.727 (end member)

Optical Properties: Transparent to translucent. *Color:* Light pink to brown. *Streak:* White. *Luster:* Adamantine. *Optical Class:* Uniaxial (+). ω and $\epsilon > 1.90$ *Pleochroism:* *E* = pale pink, *O* = pale pinkish yellow. *Absorption:* *E* > *O*.

Cell Data: *Space Group:* I4₁/amd. *a* = 7.406(6) *c* = 6.504(8) *Z* = 4

X-ray Powder Pattern: Glücksstern Mine, Friedrichroda, Thuringia, Germany. 3.707 (100), 1.853 (19), 2.759 (10), 2.623 (7), 2.939 (5), 2.309 (5), 2.088 (5)

Chemistry:	(1)	(2)
La ₂ O ₃	43.87	64.18
Ce ₂ O ₃	0.31	
Nd ₂ O ₃	9.49	
Pr ₂ O ₃	6.65	
Sm ₂ O ₃	0.58	
Y ₂ O ₃	0.31	
CaO	0.10	
UO ₂	0.03	
V ₂ O ₅	34.91	35.82
As ₂ O ₅	0.06	
P ₂ O ₅	0.02	
SiO ₂	0.04	
Total	96.37	100.00

(1) Glücksstern Mine, Friedrichroda, Thuringia, Germany; average of 10 electron microprobe analyses, corresponding to (La_{0.71}Nd_{0.15}Pr_{0.11}Sm_{0.01}Y_{0.01}) $\Sigma=0.99$ V_{1.01}O_{4.00}. (2) LaVO₄.

Mineral Group: Xenotime group.

Occurrence: A low temperature mineral in a hydrothermal barite vein.

Association: Hausmannite, barite, gottlobite.

Distribution: Glücksstern Mine, near the Gottlob quarry, Gottlob hill, Friedrichroda, Thuringia, Germany.

Name: As the La analogue of wakefieldite-(Ce) and wakefieldite-(Y).

Type Material: Mineralogical Collection, Bergakademie, Freiberg, Germany, 81876.

References: (1) Witzke, T., U. Kolitsch, J.M. Warnsloh, and J. Göske (2008) Wakefieldite-(La), LaVO₄, a new mineral species from the Glücksstern Mine, Friedrichroda, Thuringia, Germany. *Eur. J. Mineral.*, 20, 1135–1139. (2) (2009) *Amer. Mineral.*, 94, 649-650 (abs. ref. 1).