

Crystal Data: Hexagonal. *Point Group:* $\bar{3} 2/m$. As rhombohedral, pseudocubic or tabular crystals to 0.2 mm, displaying {001} and {101}.

Physical Properties: *Cleavage:* Fair on {001}. *Fracture:* Uneven. *Tenacity:* Brittle. *Hardness* = 3.5 [By analogy to alunite supergroup minerals.] *D(meas.)* = 4.15(5) *D(calc.)* = 4.159

Optical Properties: Transparent to translucent. *Color:* Orange-red to pink. *Streak:* Very pale pink. *Luster:* Vitreous.

Optical Class: Uniaxial (+). $\omega = 1.740(5)$ $\varepsilon = 1.750(5)$

Cell Data: *Space Group:* $R\bar{3}m$. $a = 7.0316(7)$ $c = 16.5151(8)$ $Z = 3$

X-ray Powder Pattern: Grubependity Lake cirque, Prepolar Ural, Komi Republic, Russia. 2.982 (100), 3.538 (55), 1.914 (38), 2.211 (28), 5.755 (27), 1.767 (24), 2.179 (19)

Chemistry:	(1)	(2)	(1)	(2)	
CaO	0.29		Nd ₂ O ₃	3.50	
SrO	1.65		Sm ₂ O ₃	0.00	
Al ₂ O ₃	25.38	25.50	MoO ₃	0.12	
Fe ₂ O ₃	0.77		P ₂ O ₅	2.54	
La ₂ O ₃	15.42	27.16	As ₂ O ₅	35.06	38.32
Ce ₂ O ₃	5.01		H ₂ O	[9.09]	9.01
Pr ₂ O ₃	1.17		Total	100.00	100.00
			REE ₂ O ₃	25.10	

(1) Grubependity Lake cirque, Komi Republic, Russia; average of 10 electron microprobe analyses, H₂O calculated for charge balance; corresponds to (La_{0.56}Ce_{0.18}Nd_{0.12}Pr_{0.04}Sr_{0.09}Ca_{0.03}) $\Sigma=1.02$ (Al_{2.94}Fe_{0.06}) $\Sigma=3.00$ (As_{1.80}P_{0.21}) $\Sigma=2.01$ H_{5.95}O₁₄. (2) LaAl₃(AsO₄)₂(OH)₆.

Mineral Group: Dussertite group in the alunite supergroup.

Occurrence: As zones within crystals of florencite-(Ce) and zoned crystals with “arsenoflorencite-(Nd)” and crandallite, in Mn-rich nodules in metasediments.

Association: Zircon, quartz, hematite, ardenite-(As), andalusite, sillimanite, anorthite, sericite, clinocllore, chernovite-(Y), monazite-gasparite group minerals.

Distribution: From the Grubependity Lake cirque, Maldynyrd range, upper Kozhim River basin, Prepolar Ural, Komi Republic, Russia; and from the Holičky, Stráž and Osečná deposits, North Bohemian Uranium District, Liberec Region, Bohemia, Czech Republic.

Name: For the La-dominant analog of arsenoflorencite-(Ce).

Type Material: Mineral Sciences Department, Natural History Museum of Los Angeles County, Los Angeles, California, USA (#62567) and the A.E. Fersman Mineralogical Museum, Russian Academy of Science, Moscow, Russia (#3891/1).

References: (1) Mills, S.J., P.M. Kartashov, A.R. Kampf, and M. Raudsepp (2010) Arsenoflorencite-(La), a new mineral from the Komi Republic, Russian Federation: description and crystal structure. *Eur. J. Mineral.*, 22(4), 613-621. (2) (2011) *Amer. Mineral.*, 96, 938-939 (abs. ref. 1).