Crystal Data: Tetragonal.  
Point Group: 4.  
As tablets, to 3 cm; platy, lamellar, massive.

Physical Properties: Cleavage: Distinct on {001}. Fracture: Irregular.  
Tenacity: Brittle.  
Hardness = 5–5.5  
D(meas.) = 3.01–3.02  
D(calc.) = 3.024  
Strongly piezoelectric.

Optical Properties:  
Transparent to translucent.  
Color: Honey-yellow, citron-yellow, sulfur-yellow, flesh-red, brick-red.  
Luster: Vitreous.  
Optical Class: Uniaxial (+).  
\( \omega = 1.593 \quad \epsilon = 1.613 \)

Cell Data:  
Space Group: \( \text{I}_4 \).  
\( a = 10.516(2) \quad c = 9.887(2) \quad Z = 8 \)

X-ray Powder Pattern:  
Stokkø Island, Langesundsfjord, Norway. (ICDD 31-304).  
2.75 (100), 2.96 (50), 3.59 (40), 2.346 (40), 2.342 (40), 2.316 (40), 1.978 (40)

Chemistry:  
\[
\begin{array}{lll}
\text{SiO}_2 & 43.66 & 43.60 \\
\text{Al}_2\text{O}_3 & 1.57 & 4.61 \\
\text{BeO} & 11.74 & 9.80 \\
\text{MgO} & 0.11 & 0.16 \\
\text{CaO} & 26.74 & 29.56 \\
\text{Na}_2\text{O} & 8.55 & 7.98 \\
\text{K}_2\text{O} & 1.40 & 0.23 \\
\text{F} & 5.73 & 5.43 \\
\text{H}_2\text{O} & 0.30 & \\
\text{O} = (\text{F, Cl})_2 & 2.41 & 2.29 \\
\text{Total} & [97.39] & [99.08] \\
\end{array}
\]

(1) Fredriksværn, Norway; \( \text{Al}_2\text{O}_3 \) includes \( \text{Fe}_2\text{O}_3 \), \( \text{Mn}_2\text{O}_3 \), original total given as 99.80% before F correction.  
(2) Åro Island, Langesundsfjord, Norway; \( \text{Al}_2\text{O}_3 \) includes \( \text{Fe}_2\text{O}_3 \), original total given as 101.37% before F correction.

Occurrence: In augite syenite (Fredriksværn, Norway).

Association: Natrolite, mica, fluorite (Fredriksværn, Norway).

Distribution: From near Fredriksværn; on several of the islands in the Langesundsfjord; and at Tvedalen, near Larvik, Norway. In Russia, from the Sakhario massif, Kola Peninsula, and at other less-well-defined localities. In the USA, in the Iron Mountain No. 2 mine, near Brown City, Sierra Co., New Mexico.

Name: From the Greek for honey-yellow and to appear, in allusion to its color.

References:  
(1) Dana, E.S. (1892) Dana’s system of mineralogy, (6th edition), 418–419.  
(3) (1970) NBS Mono. 25, 8, 135.