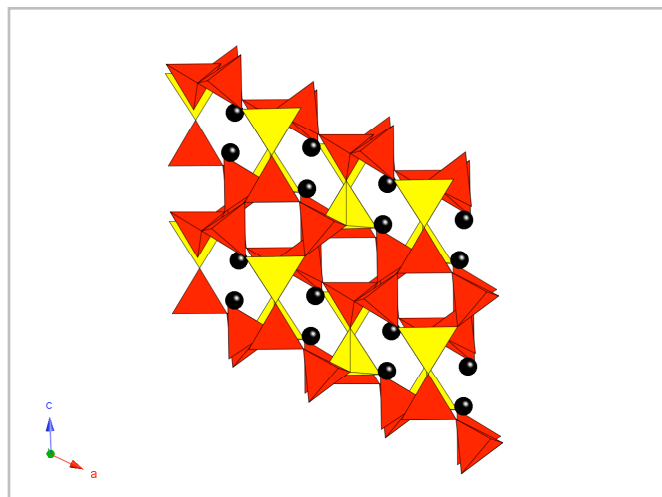


**albite**  
 $\text{NaAlSi}_3\text{O}_8$

76.1.3.1

<b>mineral group</b>	feldspar
<b>mineral subgroup</b>	plagioclase
<b>date named</b>	1815
<b>name derivation</b>	Named by Gahn and Berzelius, from the Latin albus, white, in allusion to its usual color.



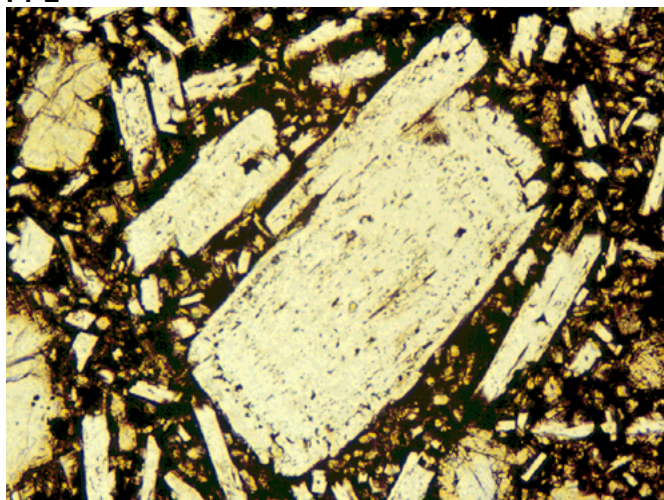
variety cleavelandite  
 Harvard ID # 106657  
 Locality: Amelia Courthouse, Amelia Co., Virginia,  
 U.S.A.

<b>Dana class</b>	Al-Si tetrahedral framework silicate	
<b>diagnostic properties</b>	white plates, commonly found in vugs in pegmatites	
<b>color</b>	white, colorless, blue, gray, red, green	
<b>luster</b>	vitreous, pearly	
<b>streak</b>	colorless, white	
<b>Mohs hardness</b>	6-6.5	<b>specific gravity</b> 2.60-2.63
<b>cleavage</b>	perfect, nearly at right angles	
<b>fracture &amp; tenacity</b>	uneven, conchoidal, brittle	
<b>habits</b>	prismatic, tabular, platy, or bladed, usually with twinning; may also be in aggregates or massive	
<b>special properties</b>	transparent to translucent; may be chatoyant (chatoyancy)	
<b>reaction with acid</b>		

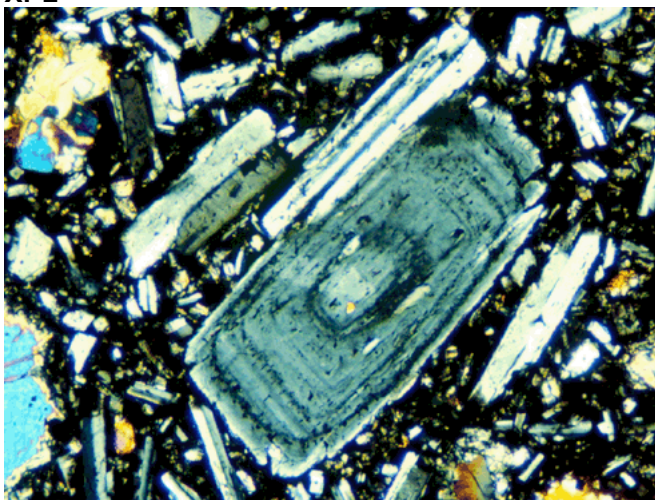
**albite**  
 $\text{NaAlSi}_3\text{O}_8$

76.1.3.1

PPL



XPL



<b>crystal class</b>	pinacoidal
<b>birefringence</b>	0.010
<b>a Axis</b>	8.137
<b>b Axis</b>	12.785
<b>c Axis</b>	7.1583
<b>alpha</b>	94.26
<b>beta</b>	116.60
<b>gamma</b>	87.7
<b>Z</b>	4

<b>crystal system</b>	triclinic
<b>reflectance</b>	
<b>space group</b>	$C\bar{1}$
<b>2V</b>	52-54, 85-90
<b>optic type</b>	biaxial
<b>optic sign</b>	+/-
<b>alpha epsilon</b>	1.526-1.530
<b>beta omega</b>	1.530-1.533
<b>gamma</b>	1.534-1.541

**optical comment**

Plagioclase can be distinguished from quartz because it is biaxial and has cleavage. Albite will have lower refractive indices than anorthite.

**occurrence**

Found in granites, pegmatites, diorites, and hydrothermal veins. Also found in low-temperature, low pressure metamorphic rocks. Usually occurs with quartz, orthoclase, muscovite, biotite, and hornblende.

**selected localities**

Topsham, Massachusetts; Gillette quarry, Granville, Washington Co., Diana, Lewis Co., Dekalb, Macomb, and Pierrepoint, St. Lawrence Co., New York; Haddam and Middletown, Middlesex Co., Connecticut; Amelia, Amelia Co., Virginia; Pikes Peak granite, Colorado; Tip Top mine, Custer, South Dakota; Harding pegmatite, northern Dixon, Taos Co., New Mexico; Pala and Mesa Grande districts, San Diego Co., California; Green River Formation, Wyoming, Colorado, and Utah; Prince of Wales Island, Alaska; U.S.A. Davis Hill and Silver Crater, northern Bancroft, Ontario; Bathurst, Wicklow Township, Hastings Co., northern Sherbrooke, Mont Saint-Hilaire, Quebec; Canada. Ojos Negros, Ensenada, BCN, Mexico. St. Gotthard, Ticino; Tavetsch, Graubunden, Switzerland. Roc Tourne, near Modane, Savoie, France. Mt. Greiner, Zillertal, Tirol, Austria. Baveno, Piedmont; Pfitschtal, Trentino-Alto Adige, Italy. Virgem da Lapa and Morro Velho, Minas Gerais, Brazil.