

**Crystal Data:** Hexagonal. *Point Group:*  $6/m\ 2/m\ 2/m, \bar{6}m2$ , or  $6mm$ . Rare fanlike aggregates of anhedral crystals, to 0.5 mm; granular massive in veinlets and fracture fillings.

**Physical Properties:** *Cleavage:* Lamellar, perfect. *Tenacity:* Brittle. Hardness = 2  
D(meas.) = 2.46(2) D(calc.) = 2.47 Soluble in H<sub>2</sub>O.

**Optical Properties:** Transparent. *Color:* Colorless. *Luster:* Vitreous to pearly.  
*Optical Class:* Uniaxial (-).  $\omega = 1.535(1)$   $\epsilon = 1.513(1)$

**Cell Data:** *Space Group:*  $P6_3/mmc, P\bar{6}2c$ , or  $P6_3mc$ .  $a = 10.06(2)$   $c = 12.72(1)$   $Z = 8$

**X-ray Powder Pattern:** Udachnaya pipe, Russia.  
4.36 (10), 3.04 (10), 2.52 (10), 2.06 (10), 6.36 (9), 1.797 (8), 2.18 (7)

Chemistry:	(1)	(2)
CO <sub>2</sub>	39.20	42.71
Al <sub>2</sub> O <sub>3</sub>	0.05	
CaO	28.39	27.21
Na <sub>2</sub> O	25.72	30.08
K <sub>2</sub> O	6.40	
Total	99.76	100.00

(1) Udachnaya pipe, Russia; by electron microprobe, average of two analyses, CO<sub>2</sub> by wet methods, corresponding to (Na<sub>1.80</sub>K<sub>0.29</sub>)<sub>Σ=2.09</sub>Ca<sub>1.10</sub>(CO<sub>3</sub>)<sub>1.93</sub>. (2) Na<sub>2</sub>Ca(CO<sub>3</sub>)<sub>2</sub>.

**Polymorphism & Series:** Trimorphous with natrofairchildite and nyerereite.

**Occurrence:** Filling fractures and as inclusions in unserpentinized but sodium metasomatized kimberlite at about 400–450 m depth.

**Association:** Shortite, halite.

**Distribution:** From the east Udachnaya twin pipe, Daldyn kimberlite field, Sakha, Russia.

**Name:** For Institute of the Earth's Crust (Institut ZEMnoy KORY in Russian), Russian Academy of Sciences, Siberian Branch, Irkutsk, Russia, where the mineral was studied.

**Type Material:** A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 87573.

**References:** (1) Yegorov, N.K., Z.F. Ushchapovskaya, A.A. Kashayev, G.V. Bogdanov, and Y.I. Sizykh (1988) Zemkorite – a new carbonate from kimberlites of Yakutia [Sakha]. Doklady Acad. Nauk SSSR, 301, 188–193 (in Russian). (2) (1990) Amer. Mineral., 75, 933–934 (abs. ref. 1).