

Cs - Be



G<sub>2</sub> BeF<sub>4</sub> A. N. Григорьев | 1963  
Ю. В. Орловъ ѿ

ЗАЯВКА СССР 152, VI, 134

КОНСАР. сплошн.

ОТЮДОБРЕНИЕ ТЕХНОЛ.  
ИЗОДЛУ М<sub>2</sub>BeF<sub>4</sub>.

III YieBeF<sub>4</sub>

1968

CsBeF<sub>3</sub>  
(Vpnef)  
CsBeF<sub>3</sub>

31042u The crystal structure of cesium trifluoroberyllate.  
Steinfink, H.; Brunton, G. D. (Univ. of Texas, Austin, Tex.).  
*Acta Crystallogr., Sect. B* 1968, 24(Pt. 6), 807-10 (Eng). CsBeF<sub>3</sub> crystallizes in space group *Pnma* with  $a = 4.828$ ,  $b = 6.004$ ,  $c = 12.794$  Å. The x-ray d. is 3.55 and  $Z = 4$ . Nine positional parameters and 16 anisotropic temp. factors were detd. from reflections measured on a Norelco PAILRED automatic crystal data collector and a General Elec. single-crystal orienter. The parameters were refined by least sqs. to an *R* of 0.067 for 267 reflections  $>\sigma$ . Each Cs<sup>+</sup> ion is surrounded by 8 F<sup>-</sup> nearest neighbors with bond distances of 2.96 to 3.40 Å. The Be<sup>2+</sup> ions have four nearest neighbor F<sup>-</sup> ions at the corners of a tetrahedron. The Be<sup>2+</sup>-F<sup>-</sup> distances are 1.50 to 1.62 Å. The structure of this compd. is similar to that of the high-temp. form of BaGeO<sub>3</sub>. The repulsion of the doubly charged Be<sup>2+</sup> ions increases the Be-F distances where the F<sup>-</sup> ions are shared between two tetrahedra. This accounts for the unusually long (1.62 Å) Be<sup>2+</sup>-F<sup>-</sup> distances.

RCZS

C.A. 1968.

69.8

1972.

Cs<sub>2</sub>Be(ClO<sub>4</sub>)<sub>4</sub>

9662k Infrared spectra of cesium, rubidium, and potassium perchloratoberyllates. Serezhkina, L. B.; Grigorovich, Z. I.; Karelina, A. I.; Tamm, N. S.; Novoselova, A. V. (Mosk. Gos. Univ. im. Lomonosova, Moscow, USSR). *Dokl. Akad. Nauk SSSR* 1972, 206(3), 634-7 [Chem] (Russ). The ir spectra of M<sub>2</sub>Be(ClO<sub>4</sub>)<sub>4</sub> (M = Cs, Rb), KBe(ClO<sub>4</sub>)<sub>2</sub>, and their dihydrates were measured in the 200-4000-cm<sup>-1</sup> region as Nujol mull. The obsd. absorption bands were assigned.  
V. Bekarek

④2 Rb<sub>2</sub>Be(ClO<sub>4</sub>)<sub>4</sub>  
KBe(ClO<sub>4</sub>)<sub>2</sub>

C.A. 1973. 78. N2.

C<sub>3</sub> Be F<sub>3</sub> ( $\Phi^*$ , 3, H<sub>T</sub>-H<sub>O</sub>)  $\bar{x}$  8429/974

Гурьевича Н.И., Бодкова В.А.,  
Миронова Г.В., Краснов К.С.,  
Данилова Т.Г.,

Редкин Л.Н. „Диаграммы химии”,  
АН СССР. М., 1974 15с. Рукопись  
ген. в Венгрии 5/III.74 N 515-71 Den

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ЕСТБ 9-К

Cs Be F<sub>3</sub> raf 1974

Girichova N. S. et.al.

ll. n.

Zh. Fiz. Chim. 1974

48(6) 1611-12 (Russ)

(all Li Be F<sub>3</sub>;  $\overline{III}$ )