00-021-0699

Status: Primary  QM: Star (S)  Pressure/Temperature: Ambient  Chemical Formula: \((\text{N} \text{H}_4) \text{CoF}_3\)  Weight %: Co43.99 F42.54 H3.01 N10.46
Atomic %: Co11.11 F33.33 H4.44 N11.11  Compound Name: Ammonium Cobalt Fluoride


SYS: Cubic  SPGR: Pm-3m (221)  AuthCellVol: 70.55  Z: 1.00  Author's Cell [AuthCell-a: 4.132Å  AuthCellVol: 70.55Å³]  Dcalc: 3.153g/cm³
SS/FOM: \(F(17) = 74.6(0.0120, 19)\)  Reference: Ibid.

Space Group: Pm-3m (221)  Z: 1.00  Molecular Weight: 133.97

Crystal Data [XtlCell-a: 4.132Å  XtlCell-b: 4.132Å  XtlCell-c: 4.132Å  XtlCell.a: 90.00°  XtlCell.β: 90.00°  XtlCell.γ: 90.00°  XtlCellVol: 70.55Å³]
Reduced Cell [RedCell-a: 4.132Å  RedCell-b: 4.132Å  RedCell-c: 4.132Å  RedCell.a: 90.00°  RedCell.β: 90.00°  RedCell.γ: 90.00°  RedCellVol: 70.55Å³]

\(\text{πωβ} = 1.506\)  Reference: Ibid.

Crystal (Symmetry Allowed): Centrosymmetric

Pearson: cP9.00  Pearson w/o H: cP5  Prototype Structure: Ca Ti O3  Prototype Structure (Alpha Order): Ca O3 Ti
Subfile(s): Ceramic (Perovskite), Inorganic, NBS Pattern, Primary Pattern  Last Modification Date: 01/29/2008

Database Comments: Color: Light violet-pink. Sample Preparation: The material was formed by the reaction of methanol solutions of "Co Br2" and "N H4 F", according to the method of Haendler et al., (1968). In moist air "Co F2 ·4 H2 O" slowly develops as a decomposition product. Temperature of Data Collection: Pattern taken at 298 K. Unit Cell Data Source: Powder Diffraction.

00-021-0699 (Fixed Slit Intensity) - Cu Kα1 1.54056Å

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