

Crystal Data: Isometric. *Point Group:* $4/m\bar{3}2/m$. As octahedral crystals to 0.15 mm, with triangle-shaped step-growth patterns on crystal faces.

Physical Properties: *Cleavage:* None. *Fracture:* Conchoidal. *Tenacity:* n.d.
Hardness = n.d. VHN = 206 (20 g load). D(meas.) = n.d. D(calc.) = 4.864

Optical Properties: Translucent. *Color:* Black to dark brown, gray in reflected light with strong reddish brown internal reflections. *Streak:* Brown. *Luster:* Adamantine.

Optical Class: Isotropic.

R: (400) 24.9, (480) 23.5, (540) 21.7, (580) 21.0, (640) 20.3, (700) 19.8

Cell Data: Space Group: $Fd\bar{3}m$. $a = 10.81(2)$ $Z = 8$

X-ray Powder Pattern: Kudriavy stratovolcano, north end of Iturup Isle, southern Kuril Islands. 3.27 (100), 1.91 (90), 1.107 (90), 2.07 (80), 1.045 (80), 1.246 (70), 2.70 (60)

Chemistry:	(1)
Cd	19.98
In	49.51
S	27.53
Fe	1.71
Zn	0.77
Ge	0.29
Se	0.04
Total	99.83

(1) Kudriavy stratovolcano, north end of Iturup Isle, southern Kuril Islands; electron microprobe analysis; corresponds to $(\text{Cd}_{0.82}\text{Fe}_{0.14}\text{Zn}_{0.05})_{\Sigma=1.01}(\text{In}_{1.99}\text{Ge}_{0.02})_{\Sigma=2.01}\text{S}_{3.98}$.

Mineral Group: Sulfospinel group.

Occurrence: As the bottom layer in fumarolic sublimate crusts.

Association: Pyrite, cadmian wurtzite, rhenium disulfide, greenockite, lead-bismuth sulfide.

Distribution: From Kudriavy stratovolcano, north end of Iturup Isle, southern Kuril Islands.

Name: As the *cadmium* analogue of *indite*.

Type Material: A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (#317/1).

References: (1) Chaplygin, I.V., N.N. Mozgova, I.A. Bryzgalov, and A.V. Mokhov (2004) Cadmioindite CdIn₂S₄. A new mineral from Kudriavy Volcano (Iturup Isle, Kuril Islands). *Zap. Vser. Mineral. Obshch.*, 133(4), 21-27 (in Russian, English abstract). (2) (2006) *Amer. Mineral.*, 91, 216-217 (abs. ref. 1).