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Crystal Data: Cubic. Point Group:  $4/m \ \overline{3} \ 2/m$  (synthetic). As spherulitic and rounded grains, to 20  $\mu$ m.

**Physical Properties:** Tenacity: Brittle (synthetic). Hardness = n.d. VHN = < 1875-2000 D(meas.) = 7.17 D(calc.) = [7.20]

Optical Properties: Opaque. Color: White, with a yellow tint in reflected light.

Luster: Metallic.

R: (480) 65.3, (546) 67.9, (589) 68.8, (656) 70.0

Cell Data: Space Group: Im3m (synthetic). a = 2.8839 Z = 2

X-ray Powder Pattern: Synthetic.

2.04 (100), 1.1774 (30), 0.9120 (20), 1.0195 (18), 1.4419 (16), 0.8325 (6)

Chemistry:

$$\begin{array}{ccc} & & (1) \\ \text{Cr} & 98.01 \\ \text{Fe} & < 0.01 \\ \text{Cu} & 0.37 \\ \text{Zn} & 1.40 \\ \hline \text{Total} & 99.78 \\ \end{array}$$

(1) Sichuan Province, China.

Occurrence: In heavy sands derived from the contact metamorphic zone between a siliceous marble and ultramafic rock (Sichuan Province, China); in a kimberlite pipe (Liaoning Province, China); in podiform chromitites (Luobusha ophiolite, China); in ultramafic dike rocks (Gavasai ore field, Russia); in kimberlite (Sakha, Russia); in serpentinite in dunite—peridotite (Far East, Russia).

**Association:** Pyrrhotite, pentlandite, chalcopyrite, platinum group minerals, danbaite (Sichuan Province, China); cohenite, moissanite, ilmenite, titanite (Gavasai ore field, Russia).

**Distribution:** In China, from an unspecified locality [Danba] in Sichuan Province [TL]; in "kimberlite pipe 50", Liaoning Province; in sea-floor muds from near the island of Diaoyudao, a few km northeast of Taiwan, at about 1500 m depth; and in the Luobusha ophiolite, 200 km southeast of Lhasa, Tibet. In Russia, from the Gavasai ore field, location not further given; in unspecified kimberlite pipes in Sakha; and at an unspecified locality in the "Soviet Far East".

**Name:** From the Greek *chroma*, *color*, as all chromium compounds are colored.

Type Material: n.d.

References: (1) Yue Suchin, Wang Wenying, and Sun Sujing (1981) A new mineral – native chromium. Kexue Tongbao, 26, 959–960 (in Chinese). (2) (1982) Amer. Mineral., 67, 854–855 (abs. ref. 1). (3) Yusupov, R.G., D.D. Dzhenchuraev, and F.F. Radzhabov (1982) Native accessory chromium and natural iron-chromium-silicon compounds in intrusive rocks from the Gavasai ore field [USSR]. Izv. Akad. Nauk Kirg. SSR, 5, 24–25 (in Russian). (4) (1983) Chem. Abs., 98, 110815 (abs. ref. 3). (5) Hull, A.W. and W.P. Davy (1931) Chrom, Cr. Strukturbericht 1913–1928, 1, 61 (in German). (6) (1955) NBS Circ. 539, 5, 20.