Isovite $(Cr, Fe)_{23}C_6$

Crystal Data: Cubic. *Point Group*: 4/*m* $\bar{3}$ 2/*m*. As irregular grains to 0.2 mm.

Physical Properties: *Cleavage*: n.d. *Tenacity*: n.d. *Fracture*: n.d. Hardness = n.d. VHN = 1300-1400 (50 g load). D(meas.) = n.d. D(calc.) = 7.4 Ferromagnetic.

Optical Properties: Opaque. *Color*: Steel-gray, white in reflected light. *Luster*: Metallic. *Optical Class*: n.d.
R: (420) 47.6, (440) 47.4, (460) 46.7, (480) 46.2, (500) 45.3, (520) 44.7, (540) 43.9, (560) 43.3, (580) 43.1, (600) 43.6, (620) 43.6, (640) 43.5, (660) 44.4, (680) 45.7, (700) 46.3

Cell Data: *Space Group*: *Fm*3*m*. *a* = 10.65(5) Z = 4

X-Ray Diffraction Pattern: Isovsky district, central Urals, Russia.
2.05 (100), 2.17 (50), 2.38 (30)

Chemistry:

	(1)
Cr	68.24
Fe	25.12
Ni	0.47
C	6.06
Total	99.89

(1) Isovsky district, central Urals, Russia; average electron microprobe analysis; corresponds to $(Cr_{16.2}Fe_{6.0}Ni_{0.1})_{\Sigma=22.3}C_{6.7}$.

Occurrence: In a heavy mineral concentrate from a gold-platinum placer deposit.

Association: Gold, platinum-group minerals, cinnabar, Cr spinel, unnamed Cr-Fe minerals including carbides.

Distribution: From the Isovsky district, central Urals, Russia.

Name: For the *Isov*sky district of the Central Urals.

Type Material: A.E. Fersman Mineralogical Museum, RAS, Moscow, Russia (90357).

References: (1) Generalov, M.E., V.A. Naumov, A.V. Mokhov, and N.V. Trubkin (1998) Isovite $(Cr,Fe)_{23}C_6$ - the new mineral from the gold-platinum bearing placers of the Urals. Zap. Ross. Mineral. Obshch., 127(5), 26-37. (2) (1999) Amer. Mineral., 84, 1686 (abs. ref. 1).