

Crystal Data: Cubic. *Point Group:* $4/m\bar{3}2/m$. A component of polycrystalline globules, to 2 mm, typically associated with damiaoite, always in the interior.

Physical Properties: *Tenacity:* “weakly malleable.” Hardness = 5.8 VHN = 573–681, 634 average (50 g load). D(meas.) = n.d. D(calc.) = 18.21

Optical Properties: Opaque. *Color:* Steel-black; bright white with a yellowish tint in reflected light. *Streak:* Black. *Luster:* Metallic.

Optical Class: Isotropic.

R: (400) 49.9, (420) 51.7, (440) 53.8, (460) 55.3, (480) 56.9, (500) 58.5, (520) 60.1, (540) 61.7, (560) 63.5, (580) 64.9, (600) 66.5, (620) 68.4, (640) 70.3, (660) 72.4, (680) 74.5, (700) 76.6

Cell Data: *Space Group:* $Pm\bar{3}m$. $a = 3.988(3)$ $Z = 1$

X-ray Powder Pattern: Near Damiao village, China.

2.30 (100), 1.203 (80), 1.99 (60), 1.41 (40), 1.151 (40), 0.997 (20), 1.33 (10)

Chemistry:

| | (1) | (2) |
|-------|------|--------|
| Pt | 82.8 | 83.60 |
| In | 16.4 | 16.40 |
| Total | 99.2 | 100.00 |

(1) Near Damiao village, China; by electron microprobe, average of eight analyses. (2) Pt₃In.

Occurrence: In a contact metasomatic Co–Cu–Pt-bearing vein in garnet-amphibole pyroxenite in contact with anorthosite and granite.

Association: Moncheite, sperrylite, cooperite, damiaoite, cobaltian malanite, bornite, chalcocopyrite, carrolite, magnetite.

Distribution: From near Damiao village and the Yixun River, about 270 km north of Beijing, Hebei Province, China [TL].

Name: For its occurrence near the Yixun River, China.

Type Material: n.d.

References: (1) Yu Zuxiang (1997) Yixunite – an ordered new native indium and platinum alloy. *Acta Geol. Sinica*, 71(4), 332–335 (in Chinese with English abs.). (2) (1998) *Amer. Mineral.*, 83, 655 (abs. ref. 1).