Yarlongite

\((\text{Cr}_4\text{Fe}_4\text{Ni})\text{C}_4\)

Crystal Data: Hexagonal. Point Group: 6mm. As irregular grains to 0.06 mm.


Cell Data: Space Group: \(P6_3mc\). \(a = 18.839(2)\) \(c = 4.4960(9)\) \(Z = 6\)

X-Ray Diffraction Pattern: Calculated pattern.
6.920 (100), 2.023 (98), 3.596 (55), 1.798 (54), 2.105 (50), 1.825 (47), 2.493 (36)

Chemistry:
\[
\begin{align*}
\text{C} & \quad 9.22 \\
\text{Fe} & \quad 40.60 \\
\text{Ni} & \quad 8.54 \\
\text{Cr} & \quad 41.38 \\
\text{Total} & \quad 99.74
\end{align*}
\]

(1) Luobasha mine, Tibet Autonomous Region, China; average electron microprobe analysis; corresponding to \((\text{Cr}_{4.14}\text{Fe}_{3.79}\text{Ni}_{0.76})\text{C}_4\). 

Occurrence: In heavy mineral separates from an ophiolitic podiform chromitite.

Association: Cohenite, tongbaite, khamrabaevite, quosongite, diamond, moissanite, wüsite, iridium ("osmirdium"), osmium ("iridosmine"), periclase, chromite, native iron, native nickel, native chromium, forsterite, Cr-rich diopside, intermetallic compounds Ni-Fe-Cr, Ni-Cr, Cr-C.

Distribution: From the Luobasha mine, Qusum County, Shannan Prefecture, Tibet Autonomous Region, People's Republic of China.

Name: From the first part of the name of the river, Yarlong Zangbo River, near the Luobasha ophiolite.

Type Material: Geological Museum of China (M11650) and at the Institute of Geology, Chinese Academy of Geological Sciences, Beijing (45).