Chaoite

Crystal Data: Hexagonal. Point Group: 6/m 2/m 2/m. As thin lamellae, 3–15 µm wide, alternating with graphite.


X-ray Powder Pattern: Nördlinger Ries crater, Germany. 4.47 (100), 4.26 (100), 4.12 (80), 3.03 (60), 2.55 (60), 2.28 (60), 3.71 (40)

Chemistry:

\[
\begin{array}{ccc}
\text{C} & 99.5 \\
\text{Si} & < 0.5 \\
\text{Cl} & < 0.5 \\
\text{Total} & 100.0
\end{array}
\]

(1) Nördlinger Ries crater, Germany; by electron microprobe, grain containing 35% chaoite.

Polymorphism & Series: Polymorphous with diamond, graphite, and lonsdaleite.

Occurrence: In shock-metamorphosed graphite gneisses and meteorites.

Association: Graphite, zircon, rutile, pseudobrookite, magnetite, nickeliferous pyrrhotite, baddeleyite.

Distribution: From Mottingen, in the Nördlinger Ries crater, Bavaria, Germany. In the Goalpara meteorite and Dyalpur achondrite meteorites. [Novo Urei stony meteorite?addbutckname,type??]


Type Material: n.d.