**Paracoquimbite**  \( \text{Fe}_2^{3+}(\text{SO}_4)_3\cdot9\text{H}_2\text{O} \)

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**Crystal Data:** Hexagonal. **Point Group:** \( \overline{3} \). Small rhombohedral crystals \( \{01\overline{2}\} \), equant pseudocubic or prismatic, with complex form development, may be sceptered on coquimbite; also granular, massive. **Twinning:** On \( \{0001\} \), common.

**Physical Properties:** **Cleavage:** On \( \{01\overline{2}\} \) and \( \{10\overline{4}\} \), imperfect. **Hardness = 2.5** 
**D(meas.) = 2.11(1) D(calc.) = 2.115** Soluble in \( \text{H}_2\text{O} \), taste astringent.

**Optical Properties:** Transparent. **Color:** Pale violet. **Luster:** Vitreous. **Optical Class:** Uniaxial (+). \( \omega = 1.550(2) \quad \epsilon = 1.555(2) \)

**Cell Data:** **Space Group:** \( R\overline{3} \). \( a = 10.926(9) \quad c = 51.300(21) \quad Z = 12 \)

**X-ray Powder Pattern:** Calculated from the crystal structure. (ICDD 27-254). 8.88 (100), 7.62 (39), 3.367 (33), 5.465 (29), 4.605 (29), 8.55 (20), 4.713 (16)

**Chemistry:**

\[
\begin{array}{ccc}
\text{SO}_3 & & \text{Fe}_2\text{O}_3 \\
41.38 & & 29.79 \\
\text{Al}_2\text{O}_3 & & \text{H}_2\text{O} \\
\text{trace} & & 28.69 \\
\hline
\text{Total} & & 99.86
\end{array}
\]

\( (1) \) Tierra Amarilla, Chile. \( (2) \) \( \text{Fe}_2(\text{SO}_4)_3\cdot9\text{H}_2\text{O} \).

**Polymorphism & Series:** Dimorphous with coquimbite.

**Occurrence:** A rare mineral formed in the oxidized zone of pyritic hydrothermal orebodies, especially in arid regions.

**Association:** Coquimbite, römerite, szomolnokite, quenstedtite, ferricopiapite, rozenite, voltaite.

**Distribution:** In Chile, from Tierra Amarilla, southeast of Copiapó, Atacama; at Chuquicamata, Alcaparrosa, near Cerritos Bayos, southwest of Calama, and Quetena, west of Calama, Antofagasta. At Myoban Spa, Oita Prefecture, Japan. From the Kamariza mine, Laurium, Greece. At Steamboat Springs, Washoe Co., Nevada, USA.

**Name:** From the Greek for near and its relation to coquimbite.

**Type Material:** n.d.


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