Crocoite - PbCr⁶⁺O₄

Hardness = 2.5 - 3. Cleavage: Poor/indistinct. Brittle; elongated crystals especially liable to breakage. Tolerates sonication but small crystals may become dislodged. Stable to dithionite (Iron OUT and Jacquard Hydro), bleach, Na₂S₂O₅, 12% H₂O₂ and 30% acetic acid. Avoid acid cleaning methods if other unidentified rare minerals are present. Slightly attacked by acids but inert to concentrated H₃PO₄ (which is used to dissolve associated gibbsite). Said to be photosensitive causing gradual darkening.

References

Mindat: https://www.mindat.org/min-1157.html

Handbook of Mineralogy: https://www.handbookofmineralogy.org/pdfs/crocoite.pdf

Hardinger, S. (2025) Mineral Specimen Cleaning and Development for the Amateur, 339 p.

Sinkankas, J. (1972) Gemstone & Mineral Data Book, 346 p. Winchester Press, New York.