

Turquoise - $\text{CuAl}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 4\text{H}_2\text{O}$

Hardness: 5 - 6 (variable but soft in earthy masses). Cleavage: Perfect (usually earthy masses with no cleavage). Tolerates pure water. Slightly attacked by HCl. Attacked by oxalic acid, H_3PO_4 , HNO_3 or H_2SO_4 . Avoid detergents, soaps, NH_3 , NaOH and other alkalis. Tolerates acetone or alcohol. Likely unstable to any dithionite recipe. Rohner reports sensitivity to atmospheric oxygen.

References

Mindat: <https://www.mindat.org/min-4060.html>

Handbook of Mineralogy: <https://www.handbookofmineralogy.org/pdfs/turquoise.pdf>

Anonymous (1970) Minerals and XLS. Rocks & Minerals, 45 (4), 293.

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

Rohner, T. (2000) Properly clean minerals online cleaning book.

www.strahlen.org/stepbystep/mineralien-reinigung2.pdf. In German.

Sinkankas, J. (1970) Prospecting for Gemstones and Minerals, 397 p. Van Nostrand Reinhold Company, New York.

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