

Bismuth - Bi

Hardness = 2 - 2.5. Cleavage: Perfect. Brittle; easily cleaved. Readily soluble in HNO_3 . Slowly soluble in hot concentrated HCl or H_2SO_4 . Slowly attacked by cold acids. Fresh fracture surfaces usually remain bright. May be attacked by H_2O_2 or bleach. Iridescent tarnish on a lab-grown crystal immediately replaced by a bright luster when dipped in a solution of one part concentrated HCl and six parts water or by one hour in 30% acetic acid.

References

Mindat: <https://www.mindat.org/min-684.html>

Handbook of Mineralogy: <https://www.handbookofmineralogy.org/pdfs/bismuth.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.