## Stibnite - Sb<sub>2</sub>S<sub>3</sub>

Hardness: 2. Cleavage: Perfect. Soft; easily bent and bruised. Insoluble in water. Dissolved in HCl. Rapidly attacked by HNO<sub>3</sub>. Attacked by H<sub>3</sub>PO<sub>4</sub> and H<sub>2</sub>SO<sub>4</sub>. Insoluble in acetic acid. Tolerates tartaric acid but attacked/completely soluble in some weak acids. Luster damaged by alkalis; avoid soaps, detergents and NH<sub>3</sub>. NaOH (5-10%) tolerated (but some luster may be lost) for crust removal but if crust formation is advanced specimen may disintegrate. Photosensitive; prolonged light exposure causes loss of luster. Tolerates Iron OUT/EDTA but leaves some samples dull or iridescent. Weast lists stibnite as soluble in ethanol, but this is most likely an error.

## References

Mindat: https://www.mindat.org/min-3782.html

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

Allington-Jones, L. (2017) Cleaning minerals: Practical and ethical considerations.

nhm.openrepository.com/handle/10141/622795

Gol, D. (2004b) Removing iron oxides. Le Regne Mineral, 59 (5), 48-50. In French.

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

King, R. (1983) The care of minerals section 2: The development of minerals. Journal of the Russell Society, 1 (2), 54–77.

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

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

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

Weast, R., Ed. (1982) CRC Handbook of Chemistry and Physics, 2380 p., CRC Press, Inc., Cleveland.