Arsenopyrite - FeAsS

Hardness = 5.5 - 6. Cleavage: Distinct/good. Resists HCl and cold concentrated citric acid; these useful to remove calcite, although prolonged soak should be avoided. Bright luster dulled quickly by concentrated HNO_3. Natural tarnish on some crystals due to etching; this tarnish cannot be removed. Water or atmospheric moisture may accelerate decomposition in which the process has already begun. If sample is partially decomposed check pH of sonication bath and basify or replace if acid sensitive minerals are present. Tolerates Iron OUT/EDTA; may be brightened. When in doubt derust with Wallers solution or Bridges solution. Gol recommends tartaric acid for derusting. Stable to NH_4HF_2 with some samples brightened but resulting luster may become dull in hours to weeks or may be permanent.

References

Mindat: https://www.mindat.org/min-305.html

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

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