

Siderite - FeCO₃

Hardness: 3.5 - 4.5. Cleavage: Perfect. Insoluble in water. Overall good but imperfect resistance to acids. Nearly inert to cold acids (HCl, citric acid) but rapidly attacked by warm acids, usually with obvious CO₂ evolution. Tolerates acetic acid but attacked (bleached) by HCl. Soluble in aqueous CO₂. Tolerates any dithionite recipe. Attacked by NH₄HF₂. Avoid H₂O₂.

References

Mindat: <https://www.mindat.org/min-3647.html>

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

Hardinger, S. (2024) Selective removal of carbonates: A preliminary study.

www.mindat.org/a/hardinger005

Hardinger, S. (2025) Mineral Specimen Cleaning and Development for the Amateur, 399 p.

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.

Weiner, K. and Hochleitner, R. (1998f) Profile siderite: Complete information about the iron carbonate. LAPIS, 23 (2), 7–11. In German.