

Forsterite - Mg_2SiO_4

Hardness: 7. Cleavage: Perfect. Insoluble in water. Decomposed by HCl with formation of gel, slower in cold acid than in warm acid. Forsterite affected more rapidly than fayalite (Fe^{2+} -end member). Slowly attacked by H_2SO_4 . Derust with any dithionite recipe or oxalic acid (but minimize exposure with oxalic acid). Derusting may cause bleaching (loss of green color). See also fayalite with which this mineral may be intergrown.

Varieties/related species (treat same as forsterite): Peridot, peridotite, olivine group.

References

Mindat: <https://www.mindat.org/min-1584.html>

Handbook of Mineralogy: <http://www.handbookofmineralogy.org/pdfs/forsterite.pdf>

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. (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.