

Muscovite - $\text{KAl}_2(\text{AlSi}_3\text{O}_{10})(\text{OH})_2$

Hardness: 2.5. Cleavage: Perfect. Easily cleaved; use care with tools or forceful mechanical cleaning methods (textile gun, vibratory impact tool, etc.) Some sources indicate that contact with water causes exfoliation and should be avoided. This is generally untrue, especially when the muscovite 'books' are tight, and water exposure is minimal. Treat as micaceous mineral. Tolerates Iron OUT/EDTA, Jacquard Hydro and oxalic acid. Rohner reports sensitivity to HCl. Stable to hot alkali/TKPP. Stable to NH_4HF_2 but may exfoliate.

Varieties/related minerals (treat same as muscovite): Fuchsite, gilbertite, oellacherite, phengite, sericite.

References

Mindat: <https://www.mindat.org/min-2815.html>

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