

Nepheline (Nephelite) - $\text{Na}_3\text{K}(\text{Al}_4\text{Si}_4\text{O}_{16})$

Hardness: 5.5 - 6. Cleavage: Poor/indistinct. Insoluble in cold water, decomposed in hot water. Readily soluble in acids. In HCl forms a gel. Attacked by cold concentrated citric acid. Remove calcite with an organic acid (acetic acid, formic acid, citric acid, etc.) but minimize exposure time.

References

Mindat: <https://www.mindat.org/min-2880.html>

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