

Motukoreaite - $\text{Mg}_6\text{Al}_3(\text{OH})_{18}[\text{Na}(\text{H}_2\text{O})_6][\text{SO}_4]_2 \cdot 6\text{H}_2\text{O}$

Hardness: 1–1.5. Cleavage: No data. Duthaler reports soluble in 5–10% HCl with effervescence; this is consistent with the Handbook of Mineralogy (IMA) formula but impossible with the Mindat formula (which lacks carbonate). May be sensitive to acetic acid, formic acid, tartaric acid or citric acid. Somewhat sensitive to alkalis. Readily dehydrates; store in sealed container.

References

Mindat: <https://www.mindat.org/min-2793.html>

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

Duthaler, R. and Weiß, S. (2024) Mineral Cleaning for Collectors, 3rd Edition, 190 p. Duthaler, Switzerland.