

# **Cowlesite - CaAl<sub>2</sub>Si<sub>3</sub>O<sub>10</sub>·6H<sub>2</sub>O**

Hardness: 5–5.5. Cleavage: Perfect. Brittle. Tschernich states this mineral is very soft and so exposed crystal groups should never be touched or wrapped, which seems contrary to expectations based on the reported Mohs hardness. Tolerates sonication. Broad intolerance to chemical treatment. Quickly attacked by HCl. Likely intolerant to oxalic acid, as are many zeolites.

## References

Mindat: <https://www.mindat.org/min-1145.html>

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

Betts, J. (2023) Mineral cleaning for amateurs.

[www.johnbetts-fineminerals.com/jhbnyc/articles/minclean.htm](http://www.johnbetts-fineminerals.com/jhbnyc/articles/minclean.htm)

Tschernich, R. (1992) Zeolites of the World, 597 p. Geoscience Press, Inc., Phoenix, Arizona.

<https://www.mindat.org/reference.php?id=1118707>