

## **Tschernichite - (Ca,Na<sub>2</sub>)[Al<sub>2</sub>Si<sub>4</sub>O<sub>12</sub>]·4-8H<sub>2</sub>O**

Hardness: 4.5. Cleavage: None observed. Brittle. Tolerates sonication but easily dislodged from a clay matrix or cavity lining. Good tolerance to HCl, which can be used to remove calcite (although often at the expense of associated clays). Acetic acid may be better to remove calcite. Likely intolerant of oxalic acid, as are most zeolites.

### References

Mindat: <https://www.mindat.org/min-4037.html>

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