

# **Frondelite - $(\text{Mn}^{2+}_{0.5}\text{Fe}^{3+}_{0.5})_2\text{Fe}^{3+}_3(\text{PO}_4)_3(\text{OH})_5$**

Hardness: 4.5. Cleavage: Very good. Soluble in HCl. Insoluble in  $\text{HNO}_3$  or  $\text{H}_2\text{SO}_4$ .

## References

Mindat: <https://www.mindat.org/min-1614.html>

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

Sinkankas, J. (1972) Gemstone & Mineral Data Book, 346 p. Winchester Press, New York.