Cryolite - Na₂NaAlF₆

Hardness = 3 - 3.5. Cleavage: None observed. Soft and brittle. Avoid wet cleaning if possible, but water without cleaning chemicals can be used if necessary. Brief sonication tolerated. Very slightly soluble in water or H_2SO_4 (with which the powder forms gaseous HF - dangerously toxic!).

References

Mindat: https://www.mindat.org/min-1161.html

Handbook of Mineralogy: https://www.handbookofmineralogy.org/pdfs/cryolite.pdf

Hardinger, S. (2025) Mineral Specimen Cleaning and Development for the Amateur, 339 p.

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