Allanite group -

$(A1^{2+}REE^{3+})(M1^{3+}M2^{3+}M3^{2+})O[Si_2O_7][SiO_4](OH)$

Hardness = Not reported. Cleavage: Not reported. May be radioactive. Crystals in matrix often heavily fractured; removal from matrix results in disintegration. Even if coated, removing too much matrix will cause disintegration. Stable to hot oxalic acid. Very slowly attacked by concentrated HCl with formation of gel.

References

Mindat: https://www.mindat.org/min-46220.html

Handbook of Mineralogy: https://www.handbookofmineralogy.org/pdfs/allanite-Ce.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.