Apophyllite group - $KCa_4(Si_8O_{20})(F,OH)\cdot 8H_2O$

Hardness: 4.5–5. Cleavage: Perfect. Soft; easily cleaved. Insoluble water. Tolerates sonication; many samples survive this treatment whereas one source suggests highly intolerant to sonication; this may instead be an issue of thermal shock and/or pre-existing basal cleavage cracks). Quickly attacked by HCl causing faces to become dull with gel formation on prolonged exposure. Attacked by most other acids including 20% acetic acid, although Crawford reports insoluble in HNO_3 or H_2SO_4. Possibly sensitive to alkalis. Becomes frosted and 'melted' after 24 hours with NH_4HF_2. Samples from Alpine-type deposits may dehydrate; store in sealed container.

A group of related zeolite minerals expected to have similar physical and chemical properties. Data given is for fluorapophyllite-(K), the most common group member.

Varieties/related minerals (treat same as apophyllite group): Fluorapophyllite and hydroxyapophyllite.

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