

VARIOUS VIEWS OF ALUM CRYSTALS (potash alum)

The “ideal” crystal shape for alum crystals is the OCTAHEDRAL form which is best shown in the Chrome Alum crystal below [A]. These are more likely to be achieved with a suspended seed crystal.

The next 2 photos [B, C] show generally well formed octahedral crystals but with the points not growing. Note the crystal is very clear, has flat smooth faces and sharp well defined edges

A truncated (cutoff) octahedral crystal [D] is obtained when the crystal growing has occurred well but the crystal was sitting on the bottom of the container.

Otherwise the crystals can grow as “flat” crystals with many faces (multi-faceted)[E]. Some of these crystals can be worthy of merit if clarity is high and it is a single crystal or is twinned.

Photo [F] shows the product of a seed growing session – a mixture of semi-octahedral and flat crystals.

Finally the last photo [G] shows the effect of “going too far” where the smaller crystal has almost perfect form but as the crystal becomes larger it loses that definition. The worst outcome is that the larger crystal becomes cloudy perhaps because of inclusion of impurities or haphazard temperature conditions.



[A. chrome alum octahedron]



[B. octahedral – meritworthy]

Alum -Octahedral Crystal

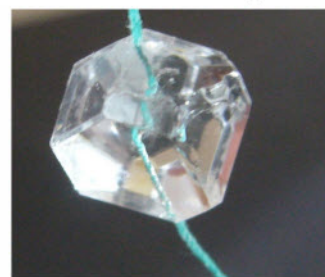


photo by judy_jowers

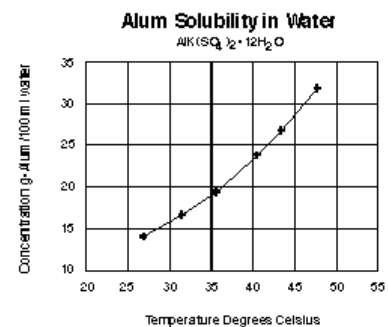
[C. not as good as B]



[D. truncated octahedron]



[E. bottom grown – clarity?]



Graph shows increasing solubility



[F. crystal mixture]



[G. crystal growing stages and problems]