

One of the chemicals we work with is roughly 60-100% ammonium acetate and 10-30% acetic acid. The designed pH is between 5.0 and 5.5. What compounds could contaminate this to cause it to crystallize?

Answer: The crystallization of such reagent may be caused by several reasons:

- a) seized impurities and foreign solid particles (e.g. dust) are becoming the centers of crystallization;
- b) great temperature decrease results in the beginning of crystallization;
- c) material of container slowly reacts (corrodes) with the chemical and this causes the crystallization (if the container isn't made from chemically inactive polyethylene or polypropylene).