

Recrystallization

Choice of solvent: substance moderately soluble in hot solvent & sparingly soluble in cold solvent

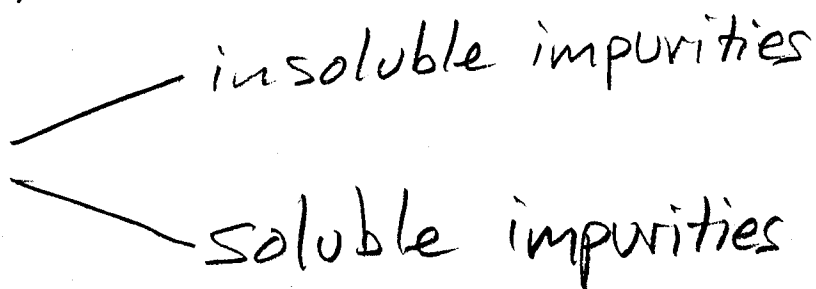
choose using rule of thumb:

"LIKE DISSOLVES LIKE"

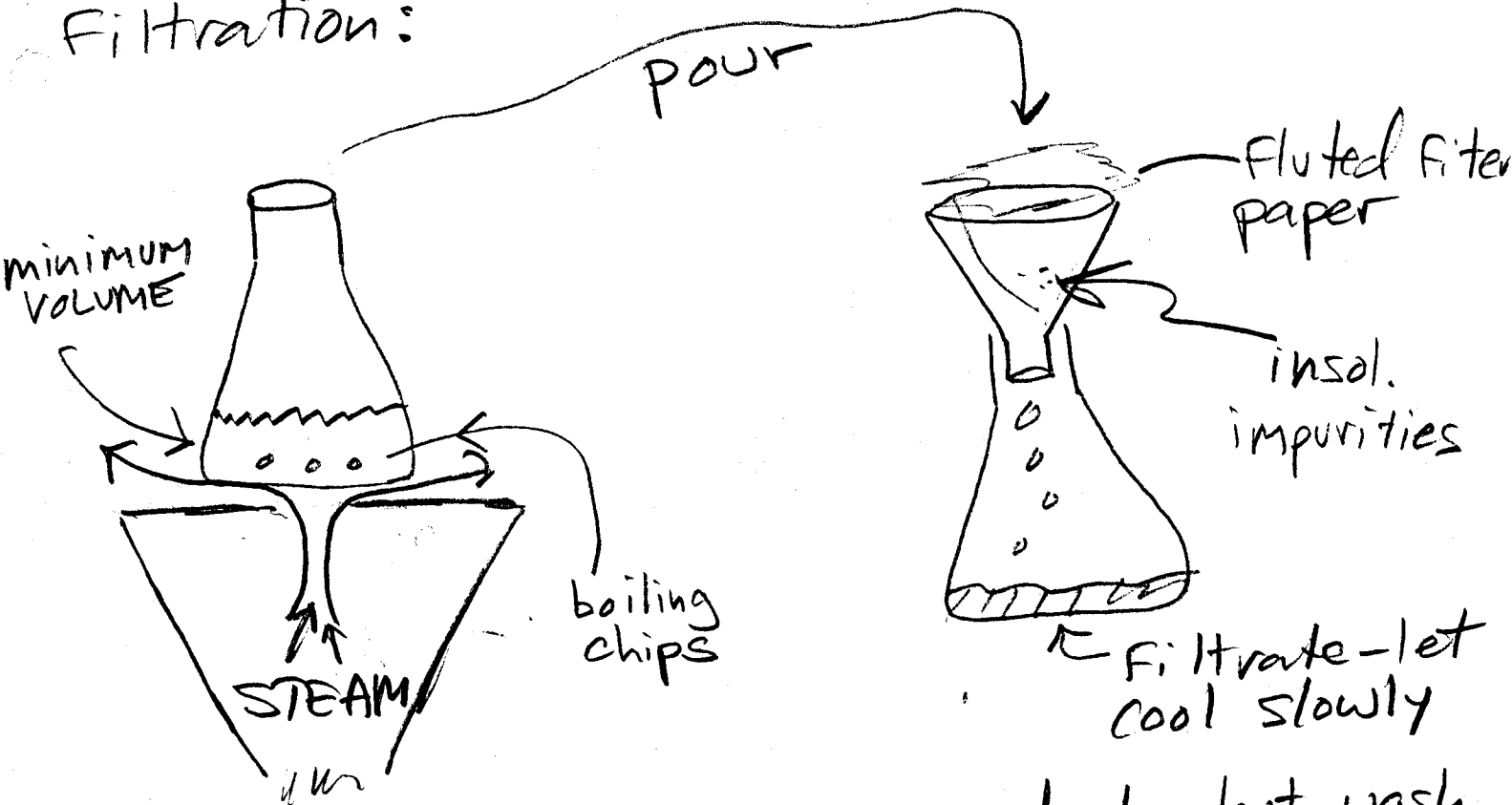
Sometimes a mixture of solvents is best.

[should read "choosing a recrystallization solvent - Op. 23d"]

main idea is that soluble impurities stay in solution while desired compound, typically the major component, crystallizes out.

In general have  insoluble impurities
soluble impurities

Remove insoluble impurities by hot
Filtration:

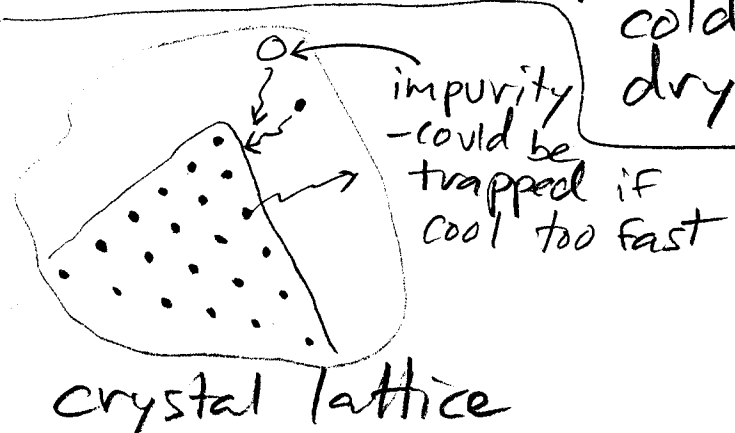


may need to hot-wash
if get ppt. on paper
- minimum volume

no xtals? scratch
or seed

Final cooling in ice bath

vacuum filter / wash with a few ml
cold solvent / air-dry /
dry in desiccator



in practice often
condense "mother liquor"
to obtain a
"second crop"

RECRYSTALLIZATION IS AN ART