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| 1. .Use a magnet to remove iron filings

Heat the remaining mixture NH4C1 sublimes and is collected as a sublimate.  Common salt remains as a residue√1 1. Add distilled water to ZnC12 solid and shake until all solid dissolves

Add K2CO3// Na2CO3 solution for form white ppt of ZnCO3(g)  Filter and wash the residue with a lot of water 1. White ppt forms and dissolves forming a clear solution the white ppt is due to formation of CaCO3 which is insoluble and dissolves into a clear/ colourless solution due to the soluble Ca(HCO3) formed√1

CO2(g) + Ca (OH)2(aq) CaO3 + H2O (l) CaCO(3)(s) + H2O(I) + CO2(g) Ca(HCO3)2(aq) White ppt Colourless soln) 14i) At 100oC l00g water 48Y 190g water  ii) In 150g of saturated solution at 100oC mass of Y = 50g At 60oC mass of Y in solution = 4Og Mass that crystallizes = 50—40 = l0g Attemp to subtract 15i) –Equation shifts to the right for more CaCO3 to decompose to replace the CO2 absorbed by the NaOH √1 ii) Equation-shift to the right as the forward reaction is endothermic hence favoured by high temp 16 Hard water deposits the insoluble Mg2 and Ca2 carbonate on the pipes preventing lead from dissolving into the water. Lead dissolves in the soft water leading to lead poisoning 17i) (32 x 8)= 256√1 ii) Plastic sulphur iii) the rings are broken to form long chains which entangle with one another making liquid viscous 18 Mass of carbon 11 x12  44 Mass of hydrogen 4.5 x 2= 0.5 √1 18 C H  |
| 3/12=  | =0.5/1  |
| 0.25  | 0.5  |
| 0.25/0.25=1 0.5/0.5=2  (CH2)n=84 12n+2n=84 √ ½   |



