

Solubility of Metal as a Hydroxide

Metal ions in water are soluble to a point. The solubility of metal ions in water is governed by pH (and other potentially complexing factors). Each metal has a different ideal insolubility pH level as you can see from the chart above. To remove metals from water we must first precipitate them by adjusting pH to the maximum insolubility point on the chart. If we want to precipitate multiple metals then we generally operate at a pH that represents the intersection of the two most important metals with a vertical line plotted to intersect the other metals of concern. This represents the best possible metal precipitation performance in a one step precipitation process. Sometimes multiple precipitation steps are necessary to obtain the performance desired. Contact www.Appliedmechtech.com for more information.