

Ammonia Removal

Ammonia can be present in water in two forms, either ammonium hydroxide (NH_3) or as the ammonium ion (NH_4^+). When the pH of the water is less than 7 the ammonia is present as the ammonium ion. As pH increases above 7, more of the ammonia is present as ammonium hydroxide.

The ammonium ion is readily removed by ResinTech CG8. Good removal capacity can be expected in waters low in hardness. Waters that are high in hardness will have decreased capacity due to the simultaneous affinity and removal of calcium, magnesium and the ammonium ion.

In waters with an elevated pH the ammonium hydroxide can be removed mechanically by means of the degasifier.

ResinTech SI R-600 is a selective zeolite that will preferentially remove ammonia in high hardness waters. Monovalent cations, like sodium, will reduce its effectiveness somewhat. Regeneration requires sodium chloride, at a dosage up to 10-lbs/cu. ft.

ResinTech SI R-600 is not sensitive to chlorine, 2 to 5 ppm will not harm it.

