

Chlorine is added to water for disinfecting purposes and the oxidation of organic matter.

In most potable city waters, a free-chlorine residual is usually present at 0.5 to 1.0 ppm to maintain disinfection throughout the water distribution network.

These chlorine residuals will damage most ion exchange resins by oxidizing them. In addition, iron (and other heavy metals) can act as an oxidation catalyst within the resin bead, especially when contacting weak acid cation resins.

Some type of dechlorination is usually necessary before ion exchange. The methods available are activated carbon beds, sodium sulfite, and sodium bisulfite or sulfur dioxide gas.

The chlorine limitations for ResinTech products are listed as follows:

ResinTech Product	Maximum Free Chlorine
Cation resins	Cation resins
CG8	1.0 ppm
CG10	1.0 ppm
WACMP	1.0 ppm
Anion resins	Anion resins
SBG1P	0.1 ppm
SBG1	0.1 ppm
SBG2	0.05 ppm
SBMP1	0.1 ppm
WBMP	0.1 ppm
Mixed bed resins	Mixed bed resins
(regenerable applications)	(regenerable applications)
MBD15	0.1 ppm
MBD10	0.1 ppm
MBED2	0.05 ppm