

Ion Exchange Resin Composition and Safety: Extracting What's Behind Regulations

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And effective water treatment device.

Summary: There's been a lot of talk in the industry lately about materials safety, extractables and resins. But dealers need not worry that softeners are imparting anything of major concern into customers' drinking water. NSF extraction testing has shown conventional resins are safe and active pre-conditioning rinses will remove extractables from most commercial resins.

Water safety and water purification are becoming increasingly important topics in the eyes of consumers. As water supply quality gains public interest, consumers are becoming curious whether their water softener is a safe

ion exchange resin is the chemically active part of the water softener. It reversibly trades calcium and other positively charged ions for sodium. For this reason, resins are considered a functional polymer. Resin can impart minute quantities of organic extractables to treated water; however, there are many other plastic and mechanical components of the softener considered extractive contributors.

This article will give you an understanding of ion exchange resins as a functional polymer, how they are manufactured and their potential for extractables from the resin. With an understanding of how resin is made

and what it does, it's easier to understand the health and safety issues surrounding ion exchange resins. Suggestions will then be made at the end of the article on how to minimize your risks and have control over resin extractables.

A "functional polymer"

Ion exchange resins are different from typical polymers because they're "functional polymers," having the potential to change the chemical composition of water that passes through it. To truly understand why the resin does what it does, it's important to first gain an appreciation of how ion exchange resins are made.

