

Chloramine Resistant O-Rings



As technology advances, we change and promote a safer, more efficient way to live. This progression however, directly effects existing standards and methods, forcing them to acclimate to a new environment, creating a new industry need.

In the Consumer Industry, water treatment facilities are using chloramine as a primary means to disinfect potable water in lieu of free chlorine. Chloramine is less reactive to organic material in water than chlorine, therefore producing much lower concentrations of disinfection by-products (which may have adverse health effects at high levels) in the distribution system. Chloramine also provides better protection against bacterial re-growth in systems with large storage tanks and dead-end water mains.

On the downside, chloramines are more aggressive to elastomers than free chlorine at equivalent concentrations. Existing seal materials can be attacked by chloramine, causing degradation, disintegration and swelling. These property changes can cause seal failure, creating performance issues and warranty claims for water handling equipment manufacturers.

The standard ASTM D6284 test for rubber properties was conducted on NSF-certified elastomer compounds, including existing Parker formulations, new Parker chloramine-resistant formulations and competitor formulations. Based on the test results, Parker's chloramine-resistant materials will provide significantly longer useful seal life compared to all others tested.

