

## SYSTEM SPECIFICATIONS



Nitrates are naturally occurring compounds that are formed when organic matter decomposes and is also found in fertilizers. Nitrates are very soluble and do not bind to soils, so they can easily get into groundwater. Nitrates in drinking water are colorless, odorless, and tasteless.

High Nitrates in water can cause serious illness, especially in babies, children, and adults with a certain type of enzyme deficiency.

The U.S. EPA recommends that well users test their water every 1 – 3 years and has set Maximum Contaminate Levels (MCL) for Nitrates in water at 10 ppm.

The VESTA-NITRATE systems utilize Purolite’s WQA Certified A520E ion exchange resin. Purolite A520E is a macroporous strong base anion exchange resin specifically designed for the removal of nitrates from potable water. Its macroporous matrix and specialized ion exchange group functionality provide exceptional nitrate selectivity, making Purolite A520E particularly effective even in the presence of moderate to high concentrations of sulfate. This resin outperforms standard exchange resins in nitrate removal applications, ensuring superior performance.

**NELSEN'S VESTA-NITRATE ANION SOLUTIONS:** offer flows of 6gpm or 10gpm and units can be added in parallel to achieve higher flow rates.

**REGENERATION:** Sodium chloride is generally preferred for regeneration for reasons of cost and efficiency. The use of softened water for make up of regenerant and rinse is often recommended to avoid the precipitation of calcium carbonate in and around the Purolite A-520E (or any other resin used in this application). Although the precipitation is not particularly detrimental in the short term, the long term effects may include increased resin attrition and leakage of nitrates.



### Certifications and Materials:



WQA Certified Components (tank, media)



NSF Certified Components (head, bypass)

Corrosion-Resistant Materials

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Model #	Flow Rate	Tank Size	Brine Tank	Dimensions
VESTA-NITRATE-6	6 GPM	10" x 54"	15w" x 17d" x 36h"	27w" x 18d" x 61h"
VESTA-NITRATE-10	10 gpm	13" x 54"	18w" x 40h"	27w" x 18d" x 61h"

**Note:** These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums. For operation outside these guidelines, contact your salesperson. Yearly testing is suggested to ensure contaminate removal.