

# UNDER THE COUNTER DIONIZED WATER

Deionized Water (DI Water) is often synonymous with De-mineralized Water due to having all of the mineral ions removed. Deionized Water when combined with Reverse Osmosis and Distilled Water are the methods in which the purest forms of water are created.

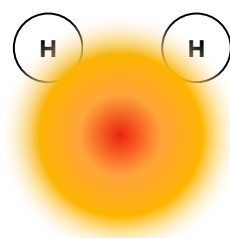


Available tank sizes between 4-80 gallons

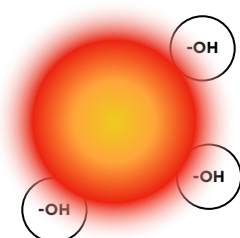
## DEIONIZATION

Deionization involves the passage of water through ion exchanges which removes ions such as calcium and fluoride and replaces them with hydrogen or hydroly ions which then reform to make purewater molecules.

**H** HYDROGEN ION



**H** ANION RESIN

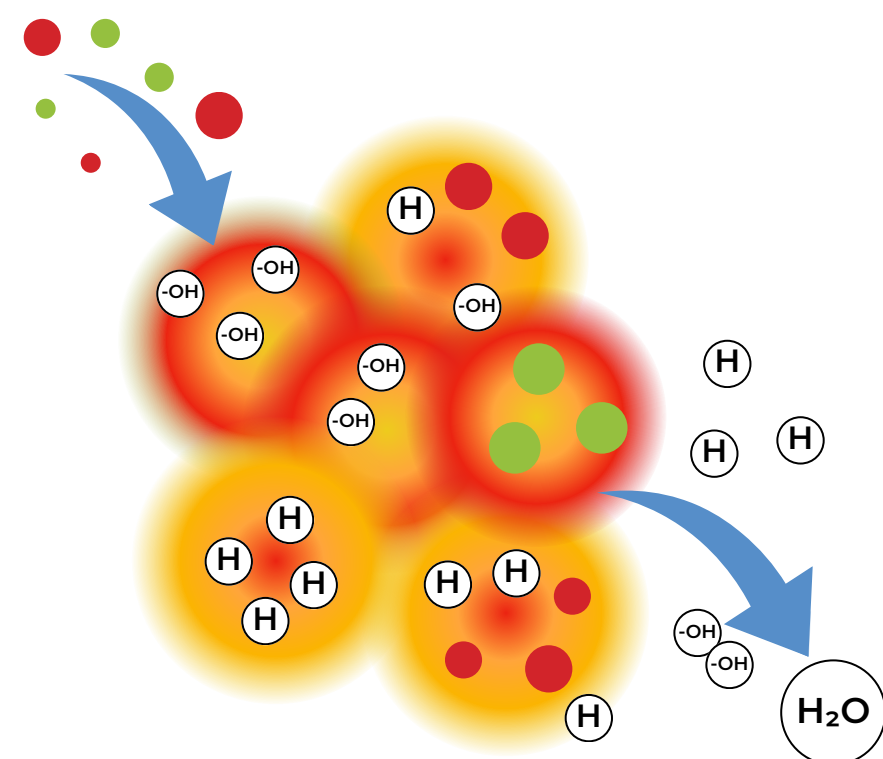


**ANION RESIN**

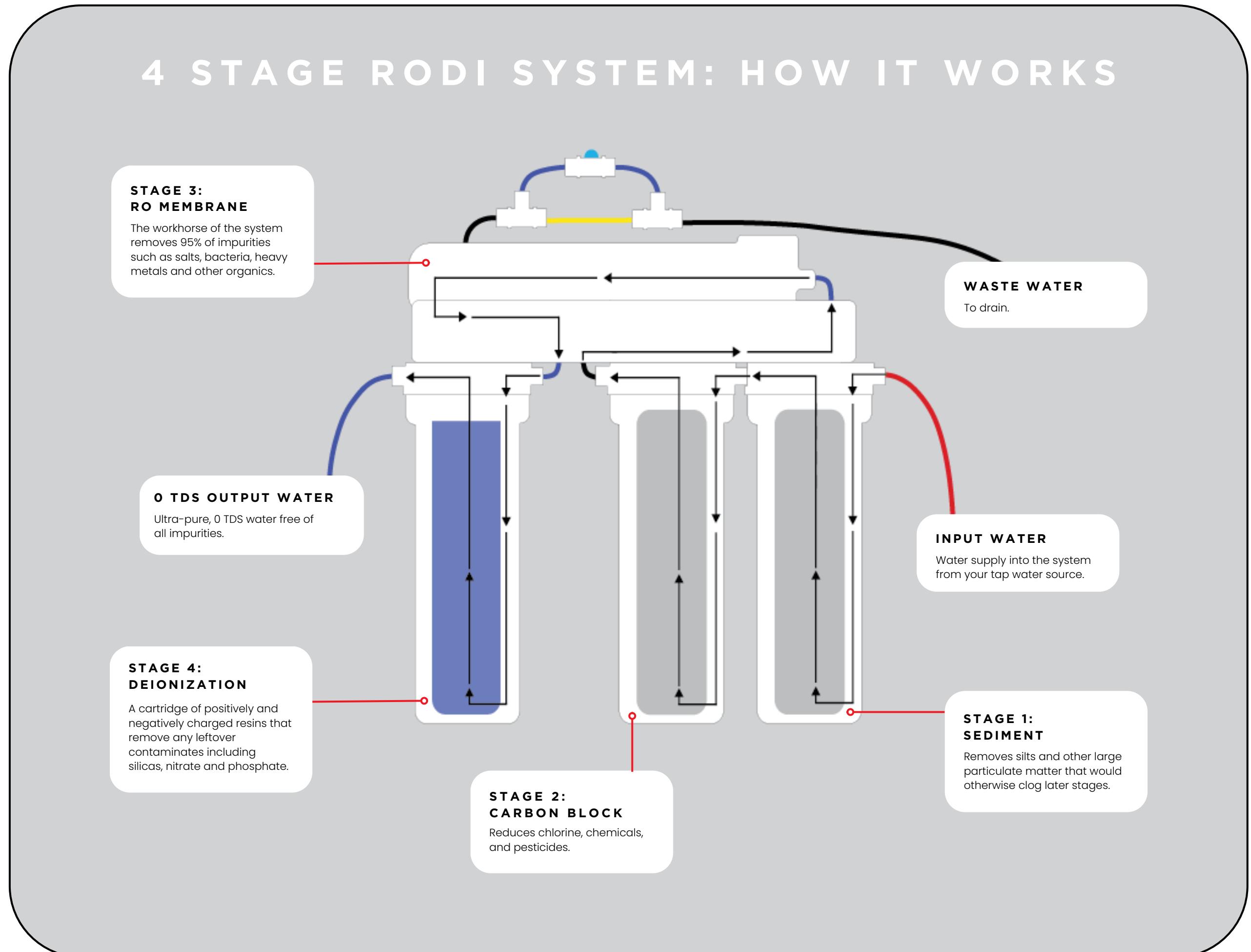
Anions are negatively charged particles including chloride, sulfate, nitrate and fluoride.

**CATION RESIN**

Cations are positively charged particles including: sodium, calcium, iron and magnesium.



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## ZERO TDS USES AND APPLICATIONS

### LABORATORY APPLICATIONS

- As solvents to prepare various solutions
- In autoclaves to extend the life of the chamber
- To clean glassware without leaving a residue
- To sterilize sensitive equipment

### MEDICAL APPLICATIONS

- To clean wounds in order to protect them from infection
- In irrigation solutions during surgery to prevent the entrance of bacteria
- In mouth rinsing during dentistry so that no bacteria is introduced to any open wounds
- In a CPAP machine

### AUTOMOTIVE APPLICATIONS

- Lead-acid batteries
- Cooling systems
- Aircraft engines
- Gas-turbine engines
- Washing mechanisms

### PHARMACEUTICAL APPLICATIONS

- Compendial articles
- Analytical reagents
- Active pharmaceutical ingredients and intermediates