



Technical Data Sheet

Deionized Water (Di Water)

Chemical Formula	: H ₂ O
Molecular Weight	: 18.02 g/mol
EC No.	: 231-791-2
CAS No.	: 7732-18-5

General information:

Deionized water, also known as DI water, is purified water with a shallow ion content. Unlike regular tap water, it does not contain minerals like sodium or potassium ions in the form of salts. Here are some of its primary applications:

Laboratories:

Deionized water is commonly used in laboratories for preparing reagents, diluting solutions, and conducting experiments. Its purity ensures accurate results in chemical analyses and biological research.

Industrial processes:

Deionized water plays a crucial role in various industrial applications:

- **Pharmaceuticals:** It is used in drug formulation, cleaning equipment, and quality control.
- **Electronics manufacturing:** DI water is essential for rinsing electronic components, preventing contamination, and ensuring optimal performance.
- **Food processing:** It is employed in food and beverage production, where purity is critical.
- **Plating:** DI water is used for electroplating and surface finishing.
- **Cosmetics:** It is an ingredient in cosmetic formulations.
- **Automotive cooling systems:** Deionized water helps prevent scale buildup and corrosion in vehicle cooling systems.
- **Steam irons:** DI water prevents mineral deposits in steam irons.
- **Photography dark rooms:** Used for film development and processing.
- **Aquariums:** DI water provides a clean environment for aquatic life.
- **Medical applications:** Deionized water is used in medical equipment, sterilization, and dialysis machines.
- **Final rinse in car washes:** Even the local car wash uses deionized water for the final rinse, leaving vehicles spot-free.

Remember, deionized water's purity makes it safe to use with sensitive instruments and chemical compounds, making it a valuable resource in various fields.



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Specification:

Physical state	Liquid
Colour	Colourless
Odour	Odourless
Freezing point	0 °C
Boiling point	100 °C at 1.013 hPa
pH	6-8 at 25 °C
Density	1 g/cm ³ at 20 °C

Expiration date:

If stored properly, the shelf life is 3-5 years.

Transportation and Storage:

Use containers made of high-density polyethylene (HDPE) or other materials that are chemically inert.

HDPE containers are ideal because they resist corrosion and maintain a cool temperature. Ensure the containers are well-sealed to prevent air exposure.

Store deionized water away from sunlight. Ideally, keep it in a dark room to prevent photochemical reactions.

Maintain a cool environment for storage. Avoid leaving it in warm areas.

Avoid metal containers, as deionized water can react with and absorb metal compounds.

Glass containers are suitable for small amounts due to their chemical inertness.

Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of reliance on the information provided herein.