



Catalog Number
ZT-PGW-500
ZT-PGW-1000

### Content and Storage Condition

Content	Quantity	Shipping Condition	Storage Condition
PCR GRADE WATER	500 mL	Room Temperature	-20°C
	1000 mL	Room Temperature	-20°C

#### Description

PCR-based molecular biology work requires the use of nuclease-free water, which is a crucial component. Nucleases, such as DNAses and RNAses, are enzymes that break down DNA and RNA strands into smaller fragments. Their presence in samples, DNA extracts, reagents, PCR products and primers can lead to active degradation of DNA. Thus, the use of nuclease-free reagents and water, along with proper laboratory practices and plastic consumables, is essential to prevent sample and reagent degradation. SOFTEC PCR Grade Water is an excellent option for routine PCR work, as it is highly purified double distilled, deionized, autoclaved water removes RNAses and DNAses. This water is free from any detectable endonucleases and ribonucleases, which is important to ensure reliable and reproducible PCR results.

#### Applications

**For PCR and qPCR protocols:** Use SOFTEC PCR grade water as a component of PCR reaction mixes when using 2x or 5x PCR Master Mixes, lyophilized PCR beads, or individual PCR reagents.

**For Primer dilution:** Use PCR grade water to dilute stock primers (e.g., 100  $\mu$ M) to working concentrations (e.g., 10  $\mu$ M) prior to use in PCR. PCR grade water can be used to dilute lyophilised primers to stock concentrations (e.g., 100  $\mu$ M).

#### Shipping conditions

Shipped at room temperature. Shipping at room temperature has no detrimental effects PCR Grade Water.

#### Storage & Stability

Shipment is at room temperature.

Storage of stock solution for a longer period at - 20 °C.

After opening, it is recommended to store the reagent at -20°C as a routine measure. However, temporary storage (e.g., during shipment) at room temperature will not adversely affect the quality of the reagent. To minimize the possibility of microbial contamination, it is suggested to aliquot the reagent into sterile tubes and freeze them.

