



### Importance of water in hospital environment

Water is an important resource for hospitals. From a study it is estimated that the total filtered Reverse Osmosis (RO) water used by the hospital per day was 200,000 L. This equated to 1093 L/patient/day.

However, for laboratories associated with hospitals the availability of potable water is not good enough but the requirement of pure & ultra-pure water is quite high. The Clinical & Laboratory Standards Institute (CLSI), formerly known as NCCLS, provides guidelines for quality of water used in various applications in a clinical laboratory.

#### CLSI-CLRW Guidelines

CLSI-CLRW: Clinical and Laboratory Standards Institute - Clinical Laboratory Reagent Water.

CLSI was formerly known as NCCLS (US National Committee for Clinical Laboratory Standards)

Contaminant	Parameter and Unit	Type 3	Type 2	Type 1	CLRW
Ions	Resistivity (MΩ-cm)	> 0.05 (50 KΩ)	> 1	> 18	> 10
Organics	Total Organic Carbon (TOC) ppb	< 200	< 50	< 10	< 500
Pyrogens	(Eu/ML)	N/A	N/A	< 0.03	---
Particles	Particles > 0.2 μm (units/mL)	N/A	N/A	< 1 (0.22 μ filtration required)	Include 0.22 μ filtration
Colloids	Silica (ppb)	< 1000	< 100	< 10	---
Bacteria	Bacteria (cfu/mL)	< 1000	< 100	< 1	< 10

Water quality is extremely important in clinical diagnostics and water quality which is below the accepted standards not only affects general operation of the analyzer but also affects the chemistry of the test. This in turn, will reduce reliability of the test results and increase calibration time and reagent costs.

Ion Exchange with over five decades of experience in innovative total water management solutions offers a range of Indion Lab Q system that ensure consistent supply of pure and ultra-pure water for various laboratory applications. Our state-of-the-art resins and membrane

manufacturing facility help us to provided economical solutions while meeting high standards.  
Our extensive service network ensures uninterrupted system functioning.