



IS 14724 : 1999 - Water Purifiers with Ultra - Violet Disinfection - Specification

"Water Purifiers with Ultra-Violet Disinfection" are devices designed to purify water by using ultraviolet (UV) light to **eliminate harmful microorganisms**. These purifiers offer an effective and **chemical-free method** of water treatment, often used in homes, offices, and various industries.

The Indian Standard **IS 14724:1999** specifies requirements for UV-based water purifiers intended to disinfect water by **neutralizing pathogenic bacteria**. This standard covers component such as the UV chamber, filter, and indicator lights, ensuring they are resistant to corrosion and UV degradation. Designed for domestic and public settings, the purifiers must adhere to flow rate and power supply standards to guarantee adequate UV exposure and **user safety**. Safety measures include proper insulation to prevent electrical hazards and materials that prevent leaching and corrosion.

The purifier's performance is assessed through various tests for turbidity reduction, suspended particle removal, **microbiological safety**, and activated carbon adsorption. Microbiological testing ensures a 99.9% reduction in pathogens, including *Sarcina lutea*, affirming its efficacy in purifying water.

Additionally, the standard mandates marking, user instructions, and proper packaging for operational guidance and quality assurance. UV water purifiers are effective in treating microbiologically unsafe water and are especially useful in areas where chemical-free, low-maintenance water purification is preferred.