

IS 14543:2024 Packaged drinking water (Other than Packaged Natural Mineral water) -Specification (Third Revision)

According to a report of the United Nations University, Institute of Water, Environment and Health, published in 2023, the global bottled water market has increased by 73% during the last decade. This increase in the market share of bottled water can be attributed to various factors- growing awareness about health and wellness, scarcity of access to clean water from local and/or natural sources owing to pollution, and increasing prevalence of several gastrointestinal diseases globally.

Bottled water for drinking purposes, otherwise known as packaged drinking water, refers to water filled in sealed containers, that is likely to be used for human consumption. The raw water can be derived from surface water, sea water, civic water supply, underground water, or any other sources, which then undergoes specified treatments, namely-filtration, demineralization, remineralization, reverse osmosis, etc. thus rendering the water safe for human consumption.

Consumers expect quality and safety in a packaged drinking water bottle, which not only demands the water to be organoleptically agreeable (i.e. agreeable taste, odour, colour, etc.) but also requires it to be microbiologically and chemically safe. It is important for the consumers to be assured that the water they are drinking will not cause any harmful health effects upon consumption.

The standard prescribes the physical, organoleptic, microbiological and chemical requirements of packaged drinking water, which also includes, prescribed limits for toxic substances, radioactive residues and pesticide residues. The standard also specifies methods of sampling and test, packing and marking requirements. Containers/bottles/pouches made of food grade plastic, paper and paper board materials, glass and metal and metal alloys may be used. Hygienic conditions that need to be ensured within the manufacturing facility of packaged drinking water have also been incorporated as an annexure to this standard.

Requirements of packaged natural mineral water are not incorporated within the scope of this standard. In this revision, advanced instrumental test methods for various parameters have been added, thus aligning the standard with latest WHO guidelines.