

Bottled Water Basics:

Questions and Answers for Consumers

What is Bottled Water?

Bottled water is water that is intended for human consumption and that is sealed in bottles or other containers. Bottled water cannot contain sweeteners and must be calorie-free and sugar-free. The only items that can be added to bottled water are flavors, extracts and essences derived from spice and fruit; or safe and suitable antimicrobial agents. Flavors added to bottled water must total less than one percent by weight of the final product. Beverages that contain more than one-percent by weight of flavor or other added ingredients are classified as soft drinks not bottled waters.

The term 'drinking water' is often used interchangeably with bottled water. Products labeled as drinking water must also fit the above definition.

Who Regulates Bottled Water?

The bottled water industry is regulated on three levels. At the federal level, the Food and Drug Administration (FDA) has set quality standards, labeling regulations, and good manufacturing practices. The Kentucky Cabinet for Health Services, Environmental Health and Safety Branch enforces the FDA regulations and standards.

In Kentucky, bottled water systems are also regulated through the Department for Environmental Protection, Division of Water. A bottled water system is defined as a water system providing bottled drinking water.

Bottlers who are members of the International Bottled Water Association (IBWA) are also regulated by this trade association. Membership in the IBWA requires bottlers to submit to an annual, unannounced plant inspection. The plant inspections are conducted by a not-for-profit, third-party inspection organization. The inspection includes an audit of quality and testing records, review of the plant operation, and check for compliance with all applicable state and federal regulations.

What are the Standards for Bottled Water?

Bottled water standards set by the FDA are very similar to the drinking water standards set by the Environmental Protection Agency (EPA) for public water systems. Both sets of standards include maximum levels for a wide variety of substances including microbiological contaminants, pesticides, inorganic contaminants, organic contaminants and others. Bottled water standards are slightly more stringent for three substances. Table 1 details these differences.

Table 1 - Differences Between FDA Standards for Bottled Water and EPA Standards for Drinking Water

Substance	EPA Maximum Level	FDA Allowable Level
Lead	0.015 ppm	0.005 ppm
Copper	1.3 ppm	1.0 ppm
Fluoride	4.0 ppm	0.8 - 2.4 ppm

Though the FDA requires sampling, they do not require bottlers to submit their test results. Test results must be available during plant inspections and must be kept for two years.

The Kentucky Division of Water requires bottlers located in Kentucky to submit test results. Microbiological sampling must be done once per week, and turbidity samples must be taken once every four hours while the system is in operation. All other sampling requirements and frequencies are the same as the requirements for public water systems.

Water bottled in other states must, at minimum, meet the FDA standards. States may choose to establish stricter standards and testing requirements.



What do the Terms on Bottled Water Labels Mean?

Standard definitions for the terms used on bottled water labels were established in May, 1996.

Spring Water - Water derived from an underground formation from which water flows naturally to the surface of the earth. Spring water can only be collected at the spring or through a bore hole that taps the underground formation feeding the spring.



Well Water - Water from an underground aquifer tapped by a hole either bored, drilled or otherwise constructed in the ground.

Sterile or Sterilized Water - Water that meets the sterility requirements of the United States Pharmacopeia (a private, not-for-profit organization of health professionals, scientists, academicians and government officials who establishes standards of quality and information on various health products and technologies).

Artesian Water or Artesian Well Water - Water from a well tapping a confined aquifer, in which the water level stands at some height above the top of the aquifer.

Ground Water - Water from a subsurface saturated zone that is under pressure equal to or greater than atmospheric pressure.

Mineral Water - Water containing not less than 250 parts per million total dissolved solids. This water must come from a source tapped at one or more bore holes or springs that originate from a geologically and physically protected underground water source.

Purified Water - Water meeting the United States Pharmacopeia definition for 'purified water'. This water must be produced by deionization, reverse osmosis, distillation or some other process that meets the Pharmacopeia definition. The label for such water may include a term that reflects the method used in producing it such as 'distilled water' or 'deionized water'.

Sparkling Water - Water that contains carbon dioxide at an amount equal to what it contained when it emerged from its source. Carbon dioxide lost during the treatment process may be added back. (Note: Carbonated waters like soda water, seltzer water and tonic water are considered soft drinks, not bottled waters.

Labeling requirements other than the standardized definitions were also established. If a bottler uses a public water system for source water, the package label must indicate that the water is from a public water system or municipal source. The only exception to this requirement is if the water is treated to meet the definitions for purified or sterilized water.

Additionally, water labeled for use in feeding infants must either meet the requirements for sterilized water or note that the water is not sterile on the label. The label must also carry the instruction, "Use as directed by physician or by labeling directions for use of infant formula."

Though the standardized labeling requirements are an improvement, the terminology can still be very confusing

How Should I Store Bottled Water?

The best storage spot is a dry, cool (room temperature) place. Bottled water should be stored away from chemicals (household cleaning products, hobby supplies, etc.), solvents (gasoline, paint thinner, etc.) and other toxic materials (insect sprays, fertilizers, etc.).

How Long Can I Store Bottled Water?

The FDA does not have an established shelf life for bottled water. However, it is recommended that you rotate your supply at least every six months. If you plan to store bottled water for more than a few days, date the container when you place it in storage.

How Can I Find Out Which Bottlers are Members of the International Bottled Water Association?

The IBWA has a listing available on their web site at <http://www.bottledwater.org>. You can also contact the International Bottled Water Association at 700 Diagonal Road, Suite 650, Alexandria, VA 22314, Phone: (703) 683-5213, or FAX: 703-683-4074.

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References:

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