

## COMMODITY ANALYSIS OF BOTTLED WATER

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European Federation of Bottled waters (EFBW) is the trade association representing the interests of the European bottled water industry.

The majority of bottled water in Europe comes from ground water sources e. g. natural mineral and spring waters, which is packaged in sealed plastic or glass containers. This differs from tap water in Europe, the majority of which comes from surface sources (lakes and rivers) and requires treatment to ensure its microbiological and chemical safety.

*Natural mineral water* is protected from pollution and is microbiologically safe. It is distinguished from other drinking water by its stable mineral and trace element content. In the EU, very limited treatments are permitted for natural water; one commonly used treatment is the addition of carbon dioxide to make “sparkling” water. Before water can be officially recognized as natural mineral water, certain information about the source and the water itself must be supplied to the relevant authority.

The term “*spring water*” refers to water from an underground source which is microbiologically safe without treatment. Spring water must satisfy many of the same conditions for mineral water regarding source protection, labelling and treatment. However, spring water does not have to meet the requirement for a stable and characteristic mineral composition as is the case for natural mineral waters. Other drinking water is the description given to bottled water that is not spring water or natural mineral water. This drinking water comes from various sources including surface waters or tap water. Treatment is permitted which results in the water achieving the microbiological and compositional requirements of the regulations.

In the European Union all food businesses producing bottled waters are subject to compliance with Regulation 852/2004/EC on the hygiene of foodstuffs. Additionally, bottled water is covered by other legislation which outline definitions of the various categories of bottled water, their extraction, treatment, safety requirements, sale, labelling and packaging.

The label must contain the following information:

1. The name of the product, which shall be “natural mineral water” or “natural spring water” or any appropriate name indicating the natural condition of the water.
2. The physical address and the name of the source.
3. The analytical composition in milligrams per litre (mg/l).

4. The specification of the kind of natural water by the use of the expression “naturally-carbonated natural water”, “natural non-carbonated natural water”, “decarbonated natural water” etc., which may be accompanied by further descriptive expressions such as “still” and “sparkling”.

The Regulations relating to Bottled Water distinguishes between natural waters, waters defined by origin and prepared waters and the following is relevant with regard to the labeling of bottled water:

Natural water is defined as: “sourced from an underground aquifer and bottled at source.”

The emphasis here is on ‘natural’ and so no treatment of the water is allowed. The composition of the bottled water is therefore identical to that of the source water. Natural mineral water and natural spring water fall into this class.

It is important that manufactures take all necessary precautions to ensure the safety of the water they bottle regardless of its source.<sup>4</sup> Good manufacturing and hygiene practices include:

- protecting the water source from external contamination prior to bottling;
- protecting bottled drinking water during distribution and storage;
- complying with all legal requirements for bottled water including labelling.

The Codex Alimentarius has published a number of codes of good practice which are relevant to manufacturers of bottled water and are available from their website.

All bottled waters are strictly regulated under EU law. Specific legislation applies to the three different categories of bottled water:

- *Natural Mineral Water – Directive 2009/54/EC on the exploitation and marketing of natural mineral waters.*
- *Spring Water – regulated partly by Directive 2009/54/EC on the exploitation and marketing of natural mineral waters, Directive 98/83/EC on the quality of water intended for human consumption.*
- *Bottled Drinking Water – Directive 98/83/EC relating to the quality of water intended for human consumption.*

Regardless of whether drinking water comes through a tap or from a bottle, its safety is of primary importance. Bottled water manufacturers must ensure that the water they produce and pack meet strict quality and safety standards. Health issues associated with drinking water whether bottled or from the tap are rare in Europe as the standards of water quality, production and packaging are high. In studies from the UK and France, consumers’ taste preferences were the main driving factor in their choice to consume tap or bottled water.