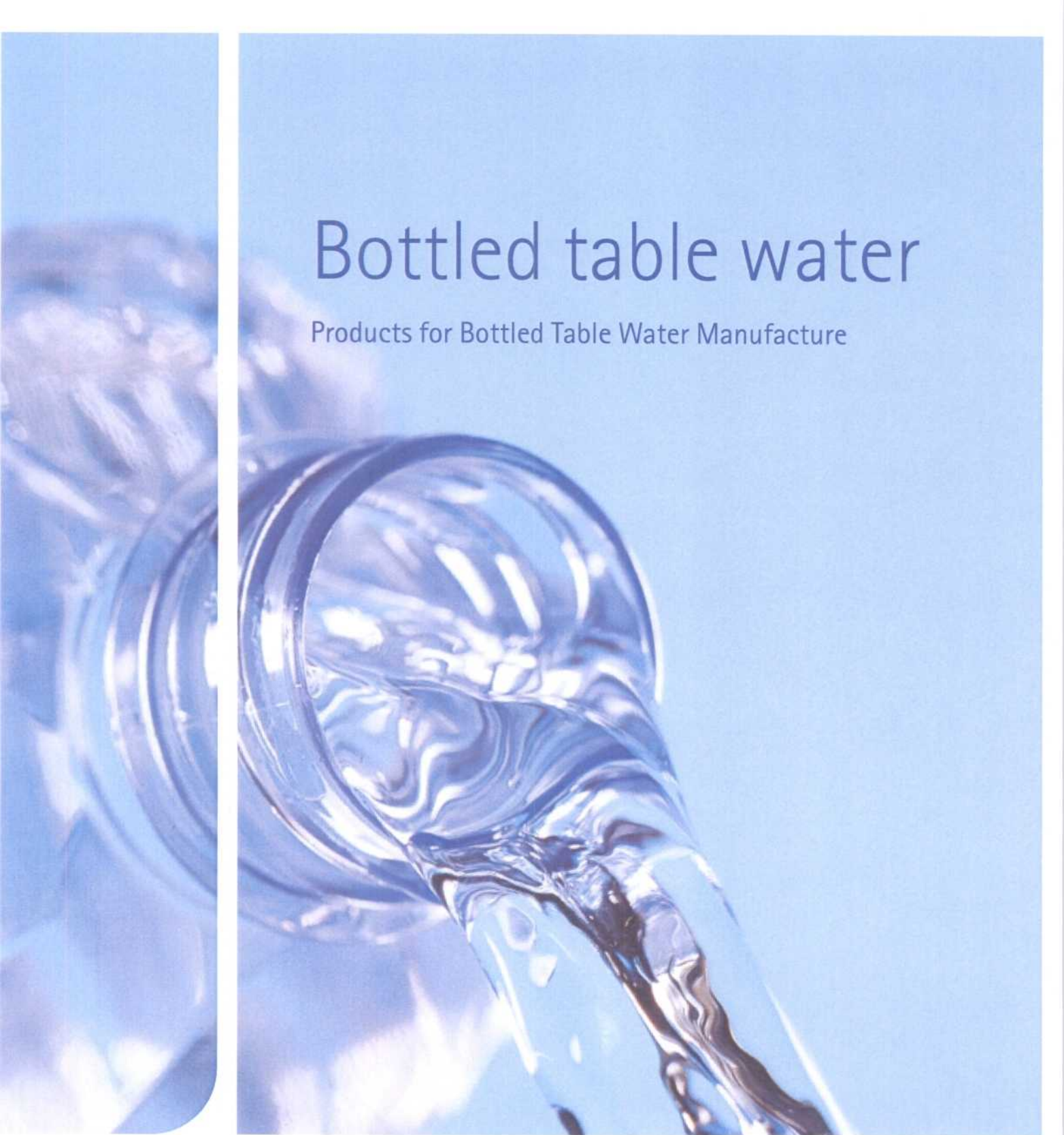
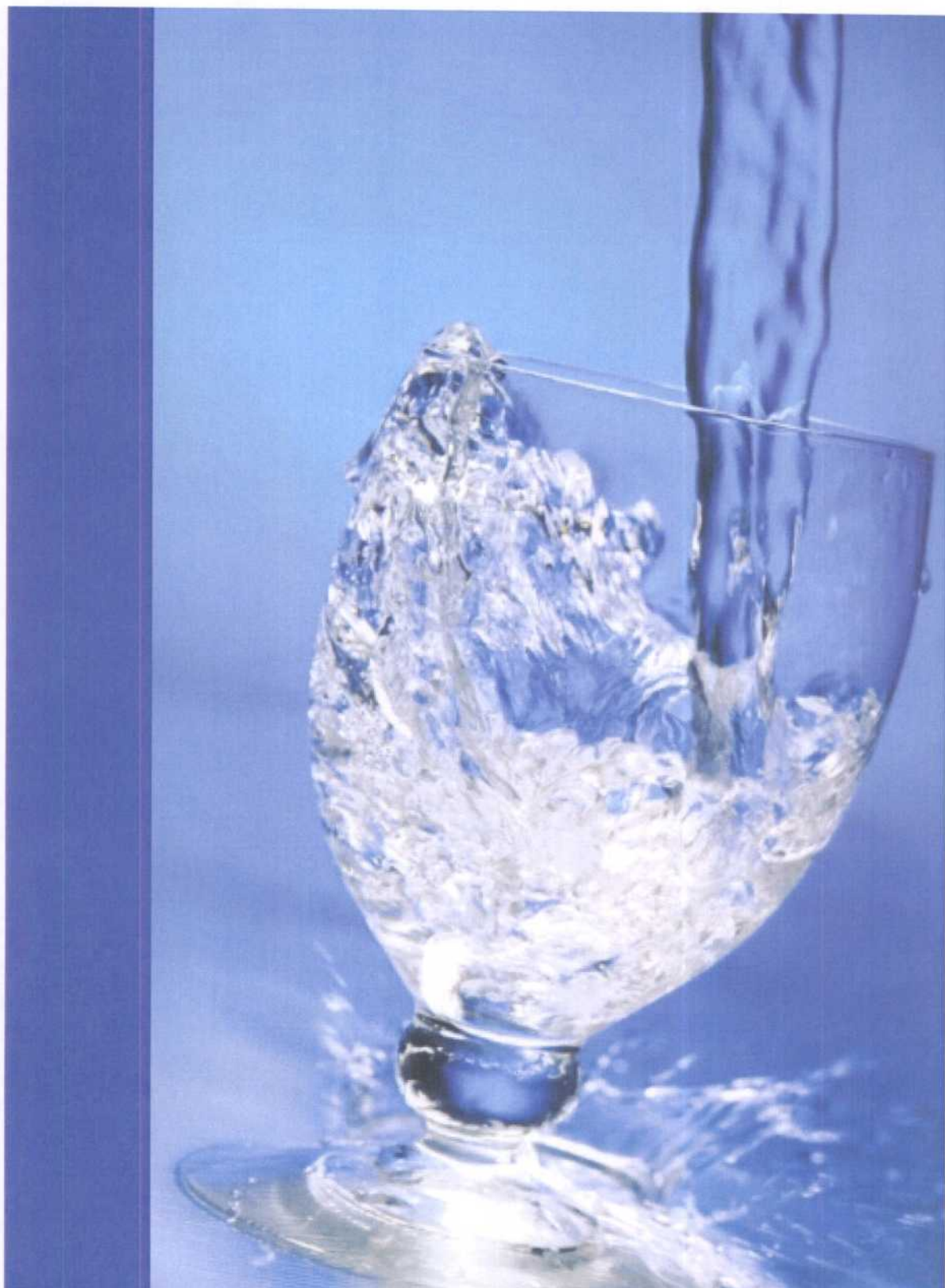




Bottled table water

Products for Bottled Table Water Manufacture





Mineral Salts for Manufacturing Bottled Table Water

Bottled Table Water – A Modern Food

Health and fitness are key elements of our modern lifestyle, and we are prepared to do a lot to achieve them. We change our eating habits and take a lively interest in the possibilities offered by modern foods. Water in its various presentations and flavors has become a fashion drink. Consequently the market for bottled water has taken off like a rocket.



Table water is mostly produced from drinking water by fortifying it with minerals. It is different from spring water in that it is not derived from a particular named source and can therefore be produced anywhere. A branded table water – irrespective of the site (or even the country) where the bottling plant is located – always has the same composition and consistent quality.

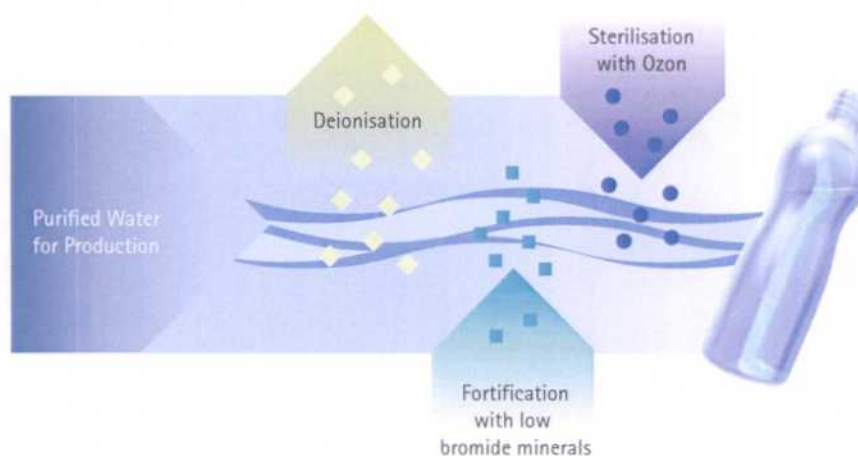
The taste of a table water is largely determined by the mineral salts it contains. By selecting these added constituents judiciously the manufacturer can carefully control the profile of his product and achieve reproducible quality. This is conditional, of course, on the mineral salts always being available in the same quality and purity.

Minerals for Life

Table water is produced by first purifying, filtering and sterilizing spring or drinking water. Then the required amounts of mineral salts are added to the filtered product. After further sterilization, this time with ozone, the table water is bottled.

When ozone is used to sterilize water containing bromide, bromate is formed as an unwelcome by-product. The defined low bromide content of Merck's mineral salts for table water keeps this by-product well below the permitted maximum concentrations.

In addition to a complete package of low-bromide mineral salts Merck can provide manufacturers of table water with a complete range of rapid tests, instruments and reagents for concurrent quality control.



Through its decades of expertise and experience in producing pharmaceutical excipients and active substances Merck meets all the criteria for producing top-quality ingredients for foods such as table water, and manufactures these ingredients in the requisite purity and quality. Merck supplies mineral salts not only in the usual standard-size packs, but also in bespoke package sizes and containers customized to suit customers' exact production needs. The advantage of this approach is that production and logistical work are quicker and simpler, and there are no chemical residues to be administered and disposed of.



The effort put into assuring the quality and safety of water is a measure of the high standing enjoyed by this most important of foods. Quality controls must be performed on the starting materials and added ingredients, production processes must be monitored, and end products must be tested for compliance with certain officially prescribed limits.

Ordering information

Cat. No.	Name	Bromide	Standard package sizes
1.72570	Calcium chloride dihydrate extra pure, for tablewater, FCC, E 509	< 10 ppm	1 kg / 5 kg / 25 kg
1.72571	Magnesium chloride hexahydrate extra pure, for tablewater, FCC, E 511	< 20 ppm	1 kg / 5 kg / 25 kg
1.72572	Magnesium sulfate heptahydrate extra pure, for table water, FCC	< 5 ppm	1 kg / 25 kg
1.72573	Potassium chloride extra pure, for tablewater, FCC, E 508	< 50 ppm	1 kg / 25 kg
1.72574	Potassium hydrogen carbonate, for tablewater, FCC, E 501	< 5 ppm	1 kg / 25 kg
1.72575	Sodium chloride, for tablewater, FCC	< 50 ppm	1 kg / 25 kg
1.72576	Sodium fluoride extra pure, for tablewater	< 15 ppm	1 kg / 25 kg
1.72577	Sodium hydrogen carbonate, for tablewater, FCC, E 500	< 5 ppm	1 kg / 25 kg
1.72578	Magnesium sulfate hydrate extra pure, for table water	< 5 ppm	1 kg / 25 kg

Additional package sizes and mineral salts are available on request.

At a glance

- Extensive range of mineral salts
- Mineral salts with the lowest bromide values
- Bespoke mineral salt mixtures and packaging
- Wide range of rapid tests, instruments and reagents for quality control

Merck Products for Water Analysis

Merck supplies an extensive range of quantitative and qualitative methods of analysis that can be employed simply, rapidly and cost-effectively both in the laboratory and in concurrent quality control during the production process. The methods offer dependability during all phases of the manufacturing process and help assure that the end product will be of the requisite quality.

Reliable water analysis with the Spectroquant® analysis system

For chemical analysis of spring and tablewater Merck recommends a photometric system that makes low-cost quantitative testing possible. The dependable detection limits of this method of measurement are superior to the limits prescribed by the European Union and World Health Organization.



*Spectroquant® test kits contain
all the reagents you need*

Analysis of bromate:

The EU Directive states that drinking water may contain not more than 0.010 mg/l bromate. For detecting bromate in drinking water Merck sells a simple method with a measuring range of 0.003 to 0.150 mg/l, allowing a precise check to be kept on bromate levels. Merck is already working on an even more sensitive method of quantitative bromate determination.

*The Spectroquant® Nova
photometer: automatic
barcode-based method
detection and 3 analytical
quality assurance (AQS)
modes for total quality
monitoring*

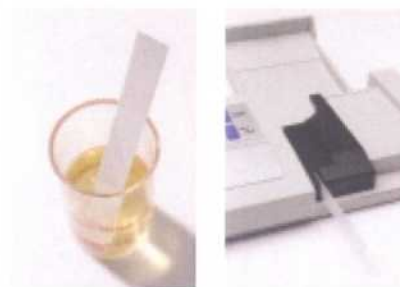




Benefit from Merck's
experience and
products.
Merck is always
pleased to oblige.

Analysis of disinfection control parameters:

Tablewater is mostly sold in returnable bottles that are cleaned and disinfected before re-use. The disinfectant solution used must, on the one hand, be of a high enough concentration to kill any organism but, on the other hand, must be capable of being completely removed from the returnable containers following disinfection. Merck sells test strips for performing visual and quantitative checks to ensure that all of the disinfectant has been removed.



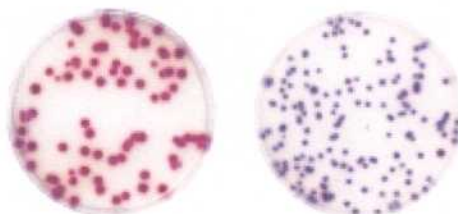
Simple procedure: dip test strip in sample, remove excess liquid and place in instrument.



*Quantitative documented results
anytime on-site with RQflex® 10
and Reflectoquant® test strips*

Microbiological analysis:

To safeguard consumers' health tablewater must be free from pathogenic organisms and must not have any noxious or harmful properties. For microbiological testing of spring and tablewater Merck has developed a comprehensive range of culture media that take account of all the recommendations, standards and official requirements.



*Simultaneous 24-hour
rapid detection of
coliform bacteria and E.
coli with Chromocult®
Coliform Agar*

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

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