



## UBA Test: Validating drinking water disinfection procedures according to EU BPR regulation

The Drinking Water Directive DWD (98/83/EC) requires that pathogens should not be present in drinking water in concentrations constituting a potential danger to human health. Sufficient elimination of pathogens in the process of drinking water treatment has to be guaranteed.

Disinfection procedures are of widely recognised relevance in ensuring the supply of safe drinking water. Disinfection is usually the final step during the production of drinking water, acting as an essential barrier against widespread human pathogens. Active substances for the disinfection of drinking water should be effective against a wide range of bacteria and viruses.

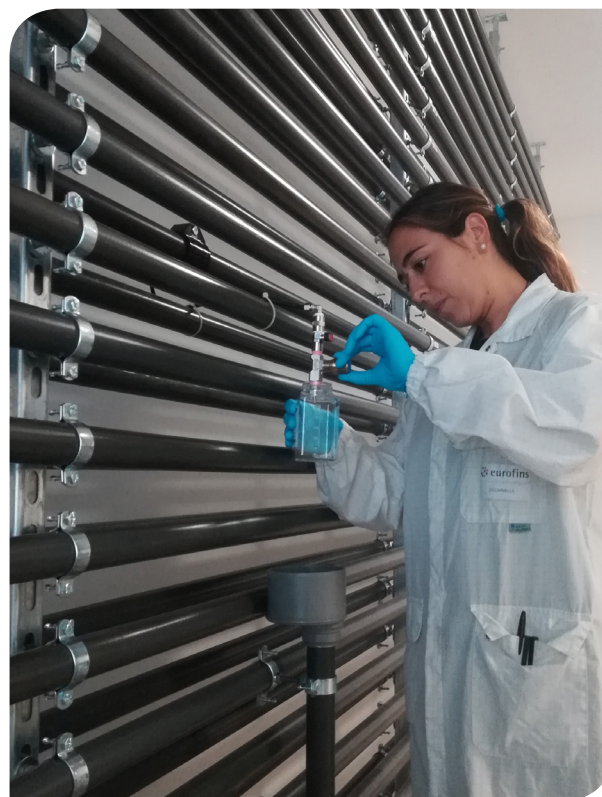
A basic paradigm for the use of substances to treat drinking water is that they should only be added for specific hygienic or technical reasons, which limits their application to the minimum volumes that are essential for achieving the targeted effect (principle of minimisation) and only under conditions optimizing their efficacy.

Authorisation of disinfectants for drinking water treatment in the EU is under the scope of the Biocidal Product Regulation (BPR), and the product authorisation requires demonstration of the treatment efficacy under conditions as described by the European Chemicals Agency (ECHA) disinfection efficacy guidance, Product type 5 (PT5) section (2018).

For now, the only test method officially accepted by ECHA in the BPR disinfection efficacy guidance is the one established by the German Environment Agency (UBA), Section Drinking Water Treatment, the UBA test (2013).

### Eurofins/UBA lab-scale solution

Eurofins BioPharma Product Testing Italy, committed to excellence in bio-analytical testing, has developed an innovative in-house test system made of a test rig working in a flow through mode similar to the disinfection procedures in waterworks, but under tightly defined conditions for input water DOC (Dissolved Organic Carbon), pH, temperature, and flow-rate fully compliant to the requirements established by the UBA test (see photo).



Additionally, dosage systems for disinfectants, bacteria and viruses, and sampling points of microbiological and chemical analysis have also been validated by performing simulated use tests with the two standard disinfectants, as required by the German test guideline.

Eurofins BioPharma Product Testing Italy is currently the only CRO able to perform the UBA test providing substantial support to clients to meet all BPR ECHA guidance requirements for biocides to be used for the treatment of drinking water.

Our exclusive testing approach is applicable to:

- Disinfection of the drinking water of suppliers and their water distribution systems
- Disinfection of raw water for individual supply
- Disinfection of water for animals

### Comprehensive GMP/GLP Testing Services

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