

# Drinking Water Installation Products



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Product Testing

## Your notes

### What are Drinking Water Installation Products?

Drinking Water Installation Products (DWIP) include the complete supply chain from the treatment of drinking water through its supply and transport in pipeline networks and pumping stations to domestic tapping points.

In the field of European regulation and standardization, there are many different national requirements for the hygienic, mechanical and acoustic assessment as well as for the certification of these products. European drinking water is subject to strict requirements and so are the materials and products that come into contact with drinking water.

### Notes

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## Table of content

### Our Service Scope

- Local Connection & Global Expertise
- What do we offer?
- Why chose Eurofins as a partner?
- Accredited TICC Service Provider
- Certification Services
- Specific Testing Services
- Type of products tested and certified

### Fact Sheets on regulatory coverage

- DK-Vand Certification (Denmark)
- GDV Approval (Denmark)
- UBA recommendation for AoC (Germany)
- KTW-BWGL requirements from UBA
- EU Drinking Water Directive (DWD)



## Local Connection & Global Expertise

### What do we offer?

- **Eurofins Product Testing** offers you a comprehensive range of services and an extensive expertise, documenting your quality and protecting your brand.
- **Testing services:** We offer a broad and growing portfolio of accredited analyses including migration testing, test for microbial growth and metal composition analysis.
- **Consulting services:** Our highly qualified staff will guide you through the complexity of European and national legislation and other requirements for your specific product.
- **Independent 3rd party role:** We obtain confidential information from raw material suppliers, if necessary, under non-disclosure agreements, and ask the right questions.
- **Cost-efficiency:** Applying an overall perspective to your supply chain, we cluster products, make worst-case calculations and establish an optimized, cost-efficient test program.
- **Regulatory compliance:** Eurofins offers the full width of our services and expertise to the entire supply chain from raw materials to finished product - delivering complete documentation of regulatory compliance.



Your professional partner

# Our Service Scope



## Why chose Eurofins as a partner?

- Our employees are **highly experienced** and possess know-how on a high international level.
- **Eurofins has state-of-the-art laboratory facilities**, refined measurement and sampling equipment, broad range of accredited methods and technical expertise on a high international level.
- Our aim is to provide **end-to-end solutions** which can be used directly by our clients.
- Our key competences: **Consulting, Testing, Inspection and Certification.**
- We offer you a **unique combination of material insight and analytical expertise** in order to comply with the regulatory requirements for your product.
- We have vast experience in **collaboration with all levels of the supply-chain** from raw material manufacturers to finished article producers, wholesalers and retailers.
- We are a flexible partner for you with **reliable results** and sufficient capacity.
- We are of course **ISO 17025, ISO 17020 and ISO 17065 accredited** and are highly focused on delivering high quality service and products.

## Accredited TICC Service Provider

- **Testing laboratory (ISO 17025)**  
for tests according to EU Drinking Water Directive and KTW-BWGL (as well as EN 16421 - testing of microbial growth - former W270)
- **Inspection body (ISO 17020)**  
to perform inspections, audits as well as test specimen sampling within the scope of the German UBA recommendation System 1+
- **Certification body (ISO 17065)**  
to issue attestation of Conformity (AoC) according to the German UBA KTW-BWGL Recommendation
- **Consultancy on European regulation**  
and standardization in the field of Drinking Water Installation Products and Materials as well as Food Contact Materials.

We offer guidance through the complexities of European legislation, on consultancy basis.



## Certification Services

### Inspection

As an **ISO 17020** accredited inspection body, Eurofins provides a wide range of certification related inspection services.

The inspection service can include the **initial inspection** and **continuous surveillance** of the factory production control and the product but also **supervising the production of test specimen**.

Furthermore, we are a **certified body** for quality control authorized by the Finnish Ministry of Environment. This authorization is required to perform **external quality control** related to Finnish Type Approvals.

Our external quality control service is approved widely with other **Nordic approvals** as well. In this way, we strive towards saving time and effort by providing our clients with **inspection and audits** for multiple approvals at once by using our wide range of accreditations and competences.



### Germany

- UBA Recommendation for attestation of conformity of product hygiene suitability for drinking water

### Nordic Countries

- Finnish STF Type Approval
- Danish GDV Approval\*
- Danish DK-Vand Certification\*
- Swedish Type Approval\*
- Norwegian Sintef Approval\*

### France

- Attestation de Conformité Sanitaire (ACS)

\*Eurofins supports with the required tests while the certification is issued by the national authorities

## Specific Testing Services

### Hygienic Requirements

#### Organic materials

- KTW evaluation criteria (KTW-BWGL)  
– plastic, organic coatings, elastomers
- EU Drinking Water Directive (EU-DWD) (EU 2020/2184)
- EN 12873-1  
(Migration – organic substances)
- EN 1420 and EN 1622  
(Sensory test for Odour and Flavour)
- EN 1484 (TOC)
- Turbidity and Colour
- Substances with specific migration limit (SML substances)
- EN 16421 (Microbial growth)
- Transitional Recommendation for Silicone acc. to UBA

#### EU DWD requirements

- Migration of Arvin Substances
- GC/MS screening for unexpected substances
- Migration testing in chlorinated and non-chlorinated water

#### Enamel & Ceramic materials

- Evaluation criteria for enamel and ceramic materials acc. to UBA

#### Metal materials

- NKB4 testing for release of heavy metals (Cd, Pb and Ni)
- Chemical composition analysis
- Dezincification resistance (ISO6509)

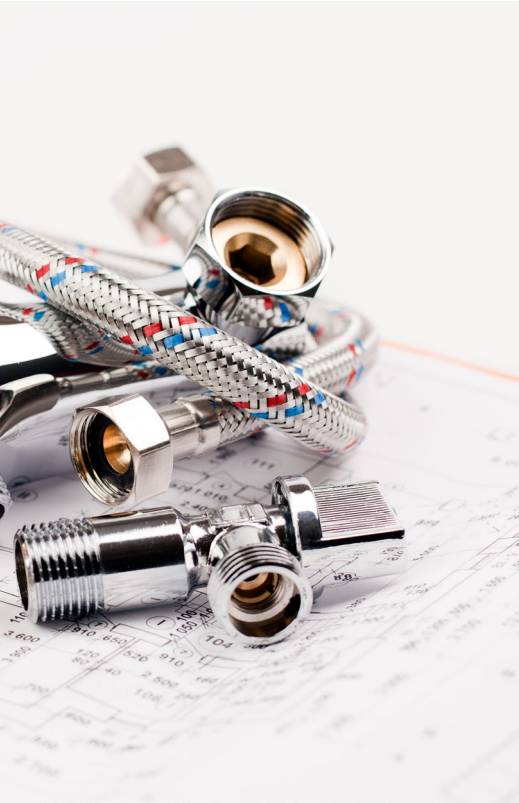
#### Cementitious materials

- Evaluation criteria for cementitious materials acc. to UBA





## Specific Testing Services



### Hydraulic/ Mechanical Requirements

- EN 13828 Stop Valves
- EN 1213 Building Valves
- EN 13959 Non-Return Valves
- EN 1267 Test of Flow resistance
- EN 3503 Bending test
- EN 12295 Pressure Cycling
- EN ISO 15875 PEX Pipes
- EN ISO 12201 PE Pipes
- EN 274 Drains
- EN 200 Single taps
- EN 816 Automatic shut-off valves
- EN 817 Mixer taps
- EN 1111 Thermostatic mixers
- EN 1112 Showers
- EN 1113 Shower hoses
- EN 1717 Backflow prevention
- EN 13618 Pressure hoses

... and more

### Electrical Requirements

- EN 15091 Electronic basin mixers

### Temperature Requirements

- Handle Temperature testing
- Temperature cycling

### Acoustic Requirements

- ISO 3822 Acoustic testing

### Surface Requirements

- EN 248 Salt spray (chromated surfaces)

## Testing and Certification

### Type of products

- Plastic and Metal Pipes
- Pressure and Shower Hoses
- Faucets, Shower and Bath Mixers , Plumbing Fixtures
- Shower Outlets (wall mounted, ceiling mounted, handheld)
- Valves, Piping and Plumbing Fittings
- Raw Materials (plastic granulate, rubbers/ (thermoplastic) elastomers)
- Coatings and Lubricants
- Water Treatment Devices, Water Meters and Pumps
- Brass, Stainless Steel and other Metallic Components
- Components, Assemblies and Final Products



## GDV Approval & DK-Vand Certification (Denmark)

### GDV Approval (Denmark)

**The GDV (Godkendt til DrikkeVand) scheme is a fee funded approval scheme for building components in contact with drinking water where building components can be **approved and certified for placement on the market and sale in Denmark.****

The approval scheme for building components in contact with drinking water (GDV) covers only the health properties of building components, namely migration of potentially harmful substances into drinking water.

The Danish Authority of Social Services and Housing is the regulatory authority for the approval scheme and are managing the processing of applications for GDV approval.

**The Danish Environmental Protection Agency under the Ministry of Environment advises the Danish Authority of Social Services and Housing on requirements, test basis and methods in order to ensure that the quality requirements for building components in contact with drinking water are fulfilled when the water reaches the taps of consumers.**

(Source: <https://www.sbst.dk/byggeri/byggevarer/building-components-in-contact-with-drinking-water/>)

### DK-Vand Certification (Denmark)

**DK-VAND is a product certification scheme.** The purpose of DK-VAND is to ensure that the Danish requirements regarding release of substances harmful to health as well as taste and smell are complied with for pipes and other products in the water supply system.

DK-VAND is established by the Danish water supply organizations and plastic pipe suppliers in cooperation with the Danish Technological Institute. It is being administrated by **DANCERT**.

**DK-VAND covers only pipes and related products in the drinking water supply whereas for products within buildings are covered by the GDV requirements.**

(Source: <https://dk-vand.org/om-dk-vand/>)



**GODKENDT  
TIL DRIKKEVAND**

## UBA recommendation for AoC (Germany)

The **UBA recommendation** serves as a basis for the attestation of conformity of the hygiene suitability of products for drinking water contact.

**Products for drinking water contact** must be both technically and hygienically suitable for this application. The technical requirements and their performance reliability are set out in the relevant product-specific standards and are therefore not covered in this recommendation.

**The hygiene requirements arise from the German Drinking Water Regulation (TrinkwV).** This regulation states that the German Environment Agency shall adopt binding evaluation criteria documents further detailing the general requirements of the Drinking Water Regulation for materials for drinking water contact. Due to formal statutory reasons, however, no procedural steps are defined in these evaluation criteria for the attestation of conformity of products with applicable requirements.

This recommendation **describes a procedure to certify hygiene requirement conformity for the materials** in the product that come into contact with drinking water. This will allow manufacturers to demonstrate that the products they sell, meet the requirements of § 17 Section 2 and 3 TrinkwV.

(Source: UBA RECOMMENDATION Conformity attestation of product hygiene suitability for drinking water<sup>1</sup>, 29<sup>th</sup> July 2021)



## KTW-BWGL requirements from UBA

The **KTW-BWGL evaluation criteria from UBA** specifies pursuant to § 17(3)TrinkwV, the general hygienic requirements for organic materials that are intended for contact with drinking water.

The following organic materials currently come under the scope of application of the KTW-BWGL evaluation **criteria document**:  
**Plastics, organic coatings, lubricants, elastomers and thermoplastic elastomers (TPE).**

According to KTW-BWGL, products or components of organic materials should be assessed based on the starting substances used to manufacture them. Assessed starting **substances are listed in material-specific positive lists in the annexes to KTW-BWGL evaluation criteria document.**

Products or components of organic materials must also be tested for substance migration into drinking water. Generally, migration testing is required, involving starting substances with restrictions and additional requirements (potential reaction and degradation products).

Products or components must also be assessed for the potential enhancement of **microbial growth**. In addition, migration water samples must be assessed for adverse impact on **odour and visual appearance**.

(Source: <https://www.umweltbundesamt.de/en/document/evaluation-criteria-document-for-plastics-other-1>)



## EU Drinking Water Directive

**The European Drinking Water Directive (DWD)** sets the future framework for ensuring high-quality drinking water throughout the European Union. While also harmonizing the hygienic conformity standards across the European Union states, it establishes strict **health and safety requirements** for materials and products in contact with water intended for human consumption - from well to tap, including both sanitary products and distribution components incl. mixers, valves, pumps, pipes, meters, storage, fittings, etc.

The directive aims to **protect public health** by preventing contamination of drinking water, **ensuring compliance with rigorous standards for chemical and microbiological safety**, and promoting the use of certified materials.

When fully implemented, manufacturers and suppliers must meet these standards to ensure their products are **safe, legal and compliant**, contributing to the reliable delivery of clean drinking water across Europe.

Article 11 of the revised directive sets out the **framework for minimum hygiene requirements** for materials in contact with drinking water. The aim is to reduce administrative burdens for manufacturers and national authorities, while also preventing contamination of drinking water.

The minimum hygiene requirements **relate to all materials, components and products** in the whole drinking water supply line and aims to prevent microbial growth and the migration of harmful substances into the drinking water.

**The Drinking Water Directive requires** that starting substances, compositions or constituents used in manufacturing materials that come into contact with drinking water, from the water source to the tap, must be listed in one of four European positive lists:

- Organic materials
- Metallic materials
- Cementitious materials
- Enamel, ceramic or other inorganic materials

# 2026

Dec. 12, 2026 marks the **beginning of the minimum hygiene requirements** coming into force and manufacturers will be able to certify their products according to the new harmonized framework for the regulation of products and substances in contact with drinking water across all EU countries.



## EU Drinking Water Directive

Materials and components are evaluated **through a risk-based approach** defining different risk groups. The evaluation of materials is based on the following two conditions:

- The conformity of the formulation of the material or object to European positive reference lists
- The conformity of the migration and microbial test results with respect to acceptability criteria

(Source: <https://echa.europa.eu/understanding-dwd>)

The requirements to materials and substances are quite similar with the existing German UBA criteria, with some differences in positive lists of substances and two added testing parameters; testing in **chlorinated water** and a GC-MS screening.

**Eurofins Product Testing is fully accredited to perform evaluation, and all tests needed do demonstrate compliance with the regulation set out in the Drinking Water Directive and can additionally offer guidance through the complexities of European legislation, on consultancy basis.**

## 2027 - 2032

2027 – 2032 will be a **transition period**. While the DWD is fully established and valid, this period ensures that manufacturers can continuously market their products using existing country specific approval schemes in the respective countries, whilst transitioning to the common DWD certification scheme.

## 2033 onwards

With the DWD fully in place, representing the **basic national hygienic requirements** in all EU member states, all products in contact with water meant for human consumption must by 2033 be tested and certified according to the new common rule set.



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