

Industry Implementation Guide – EU Drinking Water Directive

Requirements for Materials and Products

March 2026

Disclaimer

This document has been prepared by the European Drinking Water industry initiative (EDW), a broad alliance of European trade associations representing manufacturers of materials and products intended to come into contact with drinking water across the entire value chain.

The purpose of this Industry Implementation Guide is to support manufacturers, suppliers and other stakeholders in understanding and practically implementing the requirements stemming from Article 11 of Directive (EU) 2020/2184 (Drinking Water Directive) and the related implementing and delegated acts. The document is intended as practical guidance reflecting the collective experience and technical expertise of industry representatives participating in EDW working groups.

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1. Introduction

1.1 Scope and Purpose of this Document

This implementation guide is intended for industrial companies that manufacture, import, or place on the market materials and products that come into contact with drinking water. Its purpose is to provide clear, practical guidance for complying with the requirements of the EU Drinking Water Directive (EU) 2020/2184 and the related secondary legislation.

The **European Drinking Water (EDW)** initiative is an alliance of 35 European and national trade associations from across the entire supply chain of drinking water materials and products. Since its founding in 2015, EDW has established itself as the key industrial voice in this sector and a recognised partner of legislators, regulators, and stakeholders.

Why this document?

While the EU Commission's Guidance Document primarily addresses conformity assessment bodies, accreditation bodies and notifying authorities, this guide has been developed by industry experts to assist companies in implementing the regulatory requirements at operational level – from sourcing and design to certification and placing on the market.

This guide follows the logical steps of implementing the new European requirements in practice: from understanding key definitions, evaluating products and materials, navigating conformity assessment procedures, to managing internal production processes and documentation. Each section is designed to address the specific responsibilities and questions companies may encounter along this path.

1.2 Legal Background and Regulatory Context

Materials and products in contact with drinking water can affect water quality through the release of substances, microbial growth, or changes in taste, odour or appearance. The **EU Drinking Water Directive (EU) 2020/2184** therefore lays down **minimum hygiene requirements** for such materials.

To ensure consistent implementation across the EU, the Commission has been empowered under Article 11(1) of the Directive to adopt **delegated and implementing acts**. These legal acts specify:

- Positive lists of authorised starting substances and compositions,
- Testing methods and acceptance criteria for final materials,
- A mandatory conformity assessment process involving **notified bodies**,
- A harmonised EU product marking system (as per **CDR (EU) 2024/371**).

These measures are binding and directly applicable in all EU Member States starting **31 December 2026**. Existing products that are compliant with national hygienic requirements on that date may continue to be marketed under those systems latest by **31 December 2032**.

What does this mean for companies?

From 31 December 2026, all products not covered by the transitional regime have to be certified according to the new EU framework. Companies must take timely action to review and adapt their materials, documentation and product certification procedures.

1.3 Disclaimer

This document is intended for informational purposes only. It does not constitute a legally binding interpretation of the Drinking Water Directive or related legal acts. Specific details regarding product certification, testing or conformity assessment are governed by contractual agreements between manufacturers and the respective notified bodies.

Table 1 Overview of relevant documents

Document	Type	Primary Audience	Applicable From	Binding
Directive (EU) 2020/2184	EU Directive	Legislators, Authorities, Industry	12 January 2021; technical provisions from 31 December 2026	☒ Yes
Commission Implementing Decision (EU) 2024/365 – Methodologies for testing and acceptance of starting substances	Implementing Decision	Testing Laboratories, Notified Bodies	31 December 2026	☒ Yes
Commission Implementing Decision (EU) 2024/367 – Establishing the European positive lists	Implementing Decision	EU Commission, Authorities	31 December 2026	☒ Yes
Commission Delegated Regulation (EU) 2024/369 – Procedure for inclusion/removal from the European positive lists	Delegated Regulation	Industry, Authorities	31 December 2026	☒ Yes
Commission Implementing Decision (EU) 2024/368 – Procedures and methods for testing and accepting final materials	Implementing Decision	Testing Laboratories, Notified Bodies	31 December 2026	☒ Yes
Commission Delegated Regulation (EU) 2024/370 – Conformity assessment procedures and designation of conformity assessment bodies	Delegated Regulation	Conformity Assessment Bodies, Authorities	31 December 2026	☒ Yes
Commission Delegated Regulation (EU) 2024/371 – Harmonised specifications for the marking of products	Delegated Regulation	Industry	31 December 2026	☒ Yes
ECHA Guidance Volume I – Testing methodologies for starting substances, compositions, and constituents	Guidance Document	Industry, Testing Laboratories	January 2025	☒ No
ECHA Guidance Volume II – Acceptance methodologies for inclusion in the European positive lists	Guidance Document	Industry, Authorities	January 2025	☒ No

ECHA Guidance Volume III – Scope of applications under the Drinking Water Directive	Guidance Document	Industry	January 2025	X No
ECHA Guidance Volume IV – Notifications of intention for inclusion/removal from the European positive lists	Guidance Document	Industry	January 2025	X No
Supporting Document- Materials in Contact with Drinking water: Testing of Final Materials and Conformity Assessment	Guidance Document	Industry, Testing Laboratories, Notified Bodies	January 2026	X No
EDW Industry Implementation guide	Guidance Document	Industry	March 2026	X No

2. Definitions

Table 2 Definitions

Term	Definition	Source
Accreditation	‘Accreditation’ means an attestation by a national accreditation body that a conformity assessment body meets the requirements set by harmonised standards and, where applicable, any additional requirements including those set out in relevant sectoral schemes, to carry out a specific conformity assessment activity	D6
Assembled product	‘Assembled product’ means a product that consists of two or more components, that are joined together and function as a whole unit and can be disassembled without destroying the components.	D5, D6
Bill of Materials	‘Bill of Materials’ (BOM) means a nomenclature, which details the list of components and materials used to manufacture a product or an assembled product. All information needed to certify a product (or assembled product), as the wetted surface for example, can be added in the BOM.	
Cementitious material	‘Cementitious material’ means a material that contains a hydraulic cement in sufficient proportion to act as the main binder by forming a hydrate structure which governs the performance of the material.	D5
Ceramic material	‘Ceramic material’ means inorganic poly or single crystalline, non-metallic solid materials subjected to high temperature in manufacture.	D5
Certificate	‘Certificate’ means the provision by a notified body of written assurance that the product meets the minimum hygiene requirements.	D8
Component	‘Component’ means an identifiable part of an assembled product consisting of one or more materials.	D5, D6
Composition	‘Composition’ means the chemical composition of a metal, enamel, ceramic or other inorganic material.	D1
Conformity assessment body	‘Conformity assessment body’ means a body that performs conformity assessment activities, including testing, certification and inspection.	D6
Conformity assessment	‘Conformity assessment’ means the process demonstrating that a product complies with the minimum hygiene requirements.	D6
Constituent	‘Constituent’ means: any of the following: (a) a substance that has been intentionally used to	D5

	manufacture a cementitious material; (b) an alloying element present in a composition of metallic materials; (c) an element or a combination of elements present in a composition of enamels, ceramic or other inorganic materials; (d) a substance present in a mixture of substances.	
Conversion factor	‘Conversion factor’ is used to calculate the expected concentration at the tap and is based on worst-case assumptions about contact times of drinking water with the respective products or components and their surface/volume ratios in the drinking water distribution.	D8
EMG = Enhanced Microbial Growth	‘Enhancement of Microbial Growth (EMG)’ means the ability of final organic or cementitious materials to enhance the multiplication of micro-organisms under specified conditions.	D5
Enamels	‘Enamel’ means a material that is a vitreous material obtained by melting at temperatures higher than 1200°C and fritting of a mixture of inorganic substances. Note: The application temperature of enamels on the substrate (e.g. steel) is less than 1200°C (800°C – 900°C for steel)	D5
EU declaration of conformity	‘EU declaration of conformity’ means the statement issued by the manufacturer in accordance with Article 2 of CDR (EU) 2024/370, declaring that the product fulfils the minimum hygiene requirements set out pursuant to Article 11 of Directive (EU) 2020/2184.	D8
EUPL = EU Positive List	‘EU Positive List’ means the list of starting substances, constituents and materials that can be used to produce a material or component in contact with drinking water (CID (EU) 2024/367)	
Formulation	‘Formulation’ means the list of all substances or constituents used in the preparation of an organic material or of a cementitious material and their relative quantities.	D5
Inorganic material	‘Inorganic material’ means a material primarily composed of non-carbon-based substances such as metals, ceramics, glass, or mineral compounds. These materials do not contain organic polymers as the main structural component.	
Importer	‘Importer’ means any natural or legal person established within the Union who makes available products from a third country on the Union market	D6

Intermediate product	‘Intermediate product’ means a commodity which undergoes chemical reactions (e.g. curing of rubber, cross linking of plastics) to produce the final material.	D8
ISO 9001	‘ISO 9001’ is a global standard of quality management which defines the organisational criteria and requirements	
Manufacturer	‘Manufacturer’ means any natural or legal person who manufactures products or who has products designed or manufactured, and markets those products under its name or trademark, or who designs and constructs products for its own use	D6
Marking	‘Marking’ means a marking to be used to indicate that a product has been declared conform to the minimum hygiene requirements of Article 11 of Directive (EU) 2020/2184 under the procedure established by CDR (EU) 2024/370 and consists of the information text and symbol of CDR (EU) 2024/371;	D8
Material	‘Material’ means a solid, semi-solid or liquid that is used for the manufacturing of a product that is: (a) an organic composition prepared from one or more starting substances; or (b) a cementitious composition prepared from one or more constituents; or (c) a metallic, enamel, ceramic or other inorganic composition	D5, D6
Metallic material	‘Metallic material’ means a metal or metal alloy and that is used either in bulk form or as metallic plating.	D5
Migration water	‘Migration water’ means the test water that has been in contact with the test piece under the specified conditions set out in the respective Annexes I, II, III and IV of Commission Implementing Decision (EU) 2024/368.	D5
Module B	Module B (EU type examination) as set out in Annex II to Decision No 768/2008/EC of the European Parliament and of the Council carried out by a notified body with the following specifications: (i) the conformity assessment shall contain an examination of a test piece (production type); (ii) all relevant tests referred to in Implementing Decision (EU) 2024/368 shall be performed by the notified body or on behalf of the notified body; (iii) test pieces for examination shall be withdrawn by the notified body when inspecting the production site pursuant to point (b)(ii) or (iii), except when the production of products has not yet started;	D6, D9

Module C	Module C (Conformity to type based on internal production control) as set out in Annex II to Decision No 768/2008/EC.	D6, D9
Module D	Module D (Conformity to type based on quality assurance of the production process) as set out in Annex II to Decision No 768/2008/EC with the following specifications: (i) the quality system shall be assessed by the notified body that has carried out the conformity assessment procedure referred to in point (a); (ii) an initial inspection of the production site to assess the quality system and to withdraw test pieces for type examination shall be carried out by the notified body; (iii) an annual inspection of the production site to assess the quality system and to withdraw test pieces for the re-assessment of the type examination pursuant to point (a) or for a reduced testing pursuant to point (iv) of this point shall be carried out by the notified body; (iv) annual reduced testing may be performed by the notified body or on behalf of the notified body, and tests may be carried out by the manufacturer as part of the quality system.	D6, D9
(National accreditation body)	‘National accreditation body’ means national accreditation body as defined in Article 2, point (11), of Regulation (EC) No 765/2008 ‘national accreditation body’ shall mean the sole body in a Member State that performs accreditation with authority derived from the State.	D6
Notified body	‘Notified body’ means a conformity assessment body that has been notified in accordance with Article 5 of Commission Delegated Regulation (EU) 2024/370.	D6
Organic material	‘Organic material’ means a material that mainly consists of carbon-based substances (Further specification:) and falls under the following material categories: plastics, rubbers, coatings, lubricants and silicones.	D5
Pre-product	‘Pre-product’ means commodity with a specific formulation (polymers, additives and further starting substances) in any commercially available format (e.g. pellets, granules, etc.) that a manufacturer uses in the manufacturing process of a product or a component of an assembled product without undergoing any further chemical reactions.	D8
Product	‘Product’ means an object that comes into contact with water intended for human consumption, which is made of	D5, D6

	final materials and which is intended to be placed on the market.	
Product type series	‘product type series’ means: b) Pipes and other mono-material or multilayer products with different dimensions that are made of the same starting substances (formulation) in case of organic materials, same constituents in case of cementitious materials or metallic compositions, by applying the same production process and produced by the same manufacturer (see product families in CID (EU) 2024/368) b) assembled products with different geometries, different sizes and/or customer specific or additional accessories	
Risk-Group	‘Risk-group’ identifies a group of components or products having the same level of risk of drinking water contamination and is defined to determine the testing requirements and the procedure of the conformity assessment. Risk group does not apply to metallic materials.	
Summation rule	‘Summation rule’ is the rule of the wetted surface calculation for components made of the same main polymer or the same composition and is used to identify the risk group.	
Application file	‘Application file’ means the documents to be shared with the accredited laboratory and the notified body to obtain the certification of one product/assembled product.	
Technical documentation	‘Technical documentation’ means all documents provided by the manufacturer with the product to the customer that describe the technical properties of the products and/or the intended use of it.	
Test report	‘Test report’ is an official document written by the accredited laboratory after testing a material/component and giving the results and the conclusion.	
Wetted surface	‘Wetted surface’ is the surface in contact with drinking water.	

Table 3 List of references (legal + supporting document)

Ref No	Document	Document title
D1	(EU) 2020/2184	Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption

D2	CID (EU) 2024/365	Commission Implementing Decision (EU) 2024/365 of 23 January 2024 laying down rules for the application of Directive (EU) 2020/2184 of the European Parliament and of the Council as regards methodologies for testing and accepting starting substances, compositions and constituents to be included in the European positive lists
D3	CID (EU) 2024/367	Commission Implementing Decision (EU) 2024/367 of 23 January 2024 laying down rules for the application of Directive (EU) 2020/2184 of the European Parliament and of the Council by establishing the European positive lists of starting substances, compositions and constituents authorised for use in the manufacture of materials or products that come into contact with water intended for human consumption
D4	CDR (EU) 2024/369	Commission Delegated Regulation (EU) 2024/369 of 23 January 2024 supplementing Directive (EU) 2020/2184 of the European Parliament and of the Council by laying down the procedure regarding inclusion in or removal from the European positive lists of starting substances, compositions and constituents
D5	CID (EU) 2024/368	Commission Implementing Decision (EU) 2024/368 of 23 January 2024 laying down rules for the application of Directive (EU) 2020/2184 of the European Parliament and of the Council as regards the procedures and methods for testing and accepting final materials as used in products that come into contact with water intended for human consumption
D6	CDR (EU) 2024/370	Commission Delegated Regulation (EU) 2024/370 of 23 January 2024 supplementing Directive (EU) 2020/2184 of the European Parliament and of the Council by laying down conformity assessment procedures for products that come into contact with water intended for human consumption and the rules for the designation of conformity assessment bodies involved in those procedures
D7	CDR (EU) 2024/371	Commission Delegated Regulation (EU) 2024/371 of 23 January 2024 supplementing Directive (EU) 2020/2184 of the European Parliament and of the Council by establishing harmonised specifications for the marking of products that come into contact with water intended for human consumption
D8	Guidance document	
D9	768/2008/EC	DECISION No 768/2008/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 July 2008 on a common framework for the marketing of products, and repealing Council Decision 93/465/EEC

3. Process Overview

Below is a graphical overview of all individual process steps. The illustrated process steps are described in detail in the following chapters.

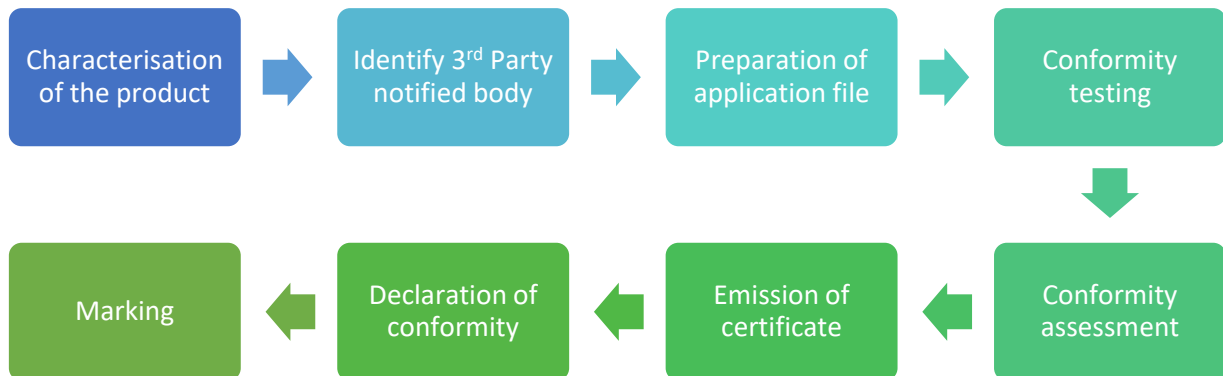
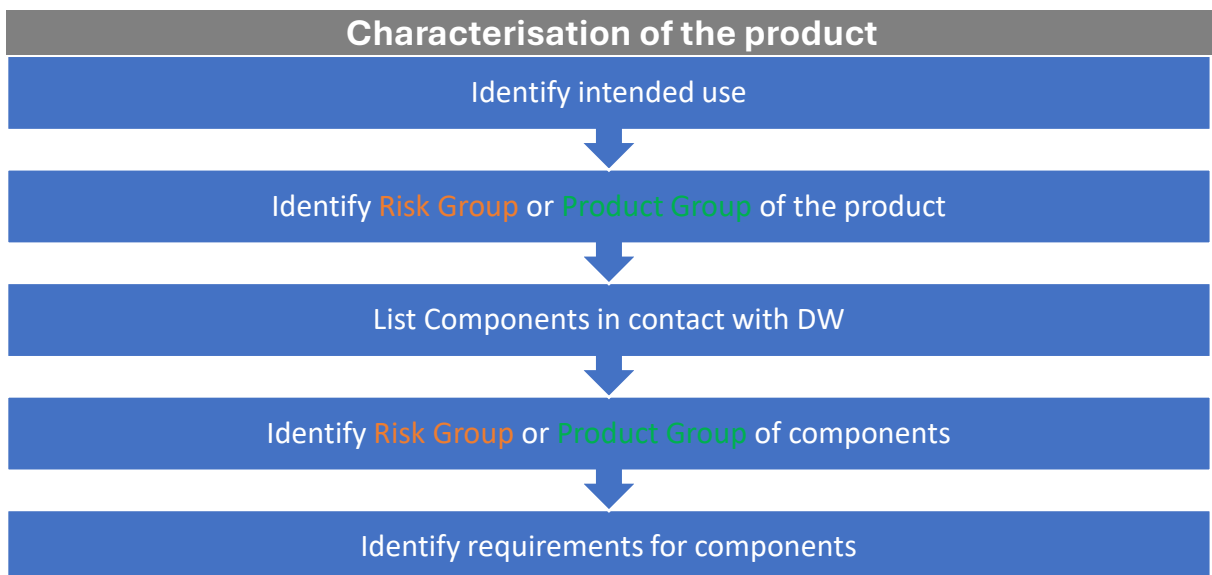


Figure 1 Graphic illustration of the process

4. Explanation of the process

4.1 Product



Legend:

Metallic materials = Product Group

Other materials = Risk Group

To apply for a certification for products intended to be used in drinking water, it is important to gather all necessary information about the product. First, it is necessary to define, for which

temperatures the product is intended and how the product can be categorized. Additionally, it should be clear which products are intended to be covered within one product (family) certificate.

Below are the essential elements to be included in the application:

- General description of the product
- Conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.
- Descriptions and explanations necessary for the understanding of those drawings and schemes and the operation of the products
- Specification for each component including:
 - Type of material (e.g. PE-Xa, POM, CW511L)
 - The wetted surface area
 - The manufacturer(s) or suppliers of the component and alternative suppliers
 - The production site(s)
 - Suppliers of the starting substances (if used directly to produce components of the assembled product), pre-products, intermediate products, compositions or constituents
 - Certificates available for the components, pre-products, intermediate products, formulations, compositions or constituents
- Wetted surface area of the complete assembled product
- ID of the piping system the product is intended to be installed
- Any other relevant information for the assessment of the product

More details about these aspects can be obtained from the following chapters.

4.1.1 Characterization of the product

The starting point to initiate the certification process is the characterization of the product. The certification body requires detailed information about the product. This includes:

- **Product Description:** A comprehensive overview of the product, including its intended use and functionality. This should clearly outline what the product is designed for and its primary applications.
- **Temperature Specifications:** Information on the temperatures at which the product is intended to be used. This includes specifying whether the product is suitable for cold, warm, or hot waters. Warm water is for application where the average temperature under normal operation is between 30°C and 70°C. Hot water application is for application where the average temperature under normal operation exceeds 70°C. [REFERENCE TO chapter 3.1 of ANNEX I CID (EU) 2024/368]
- **Intended product use:** It should be stated if the product is a stand-alone product (used directly to be installed into a drinking water installation) or if it is (only) a component of a more complex product. The products use has influence on the product conformity assessment process, as this information may (dependent on its size and the size of the product it is integrated in) change the risk group of the product. If the product can be a stand-alone product and component at the same time, the stricter requirements apply. In borderline cases, e.g. for components that are used in assembled products which may fall into either risk group 2 or risk group 3 (depending on the wetted surface fraction in the assembled product), it is recommended to have the component assessed according to the requirements of risk group 2.

4.1.2 Check the risk group of the product

The Risk and Product groups are defined to assess the potential impact of the material on the quality of Drinking Water. Product Groups (PG) are applicable to metallic materials while Risk Groups (RG) are applicable to other materials (organic, cementitious, enamels, ceramic and other inorganic) and assembled products. The product group mentioned for non-metallic materials is different from the product group of metals and will therefore be called “product category” in the following text to have a clear distinction.

4.1.2.1 Risk Group

The risk group is only relevant for materials not being fully metallic.

By defining the risk group of the product, it is possible to obtain the “product category” (“Product group” in the table but differing from the metal’s product group) of the product. With the product category, the applicable conversion factor can be identified, which is relevant for the assessment of the test results of each (non-metallic) material.

The following table is built on basis of table 5 of annex I of CID (EU) 2024/368.

Table 4 Risk Groups, Product Groups and CF

Risk Group	Product Group		CF (in d/dm)
	A	Pipes and pipe linings	
RG1	1	ID < 80 mm (domestic installations, buildings)	20
RG1	2	80 mm ≤ ID < 300 mm (service piping)	10
RG1	3	ID ≥ 300 mm (mains piping)	5
	B	Fittings, ancillaries	
RG2	1	ID < 80 mm (domestic installations, buildings)	2
RG2	2	80 mm ≤ ID < 300 mm (service piping)	1
RG2	3	ID ≥ 300 mm (mains piping)	0.5
	C	Components of fittings, ancillaries	
RG3	1	ID < 80 mm (domestic installations, buildings)	0.2
RG3	2	80 mm ≤ ID < 300 mm (service piping)	0.1
RG3	3	ID ≥ 300 mm (mains piping)	0.05
	D	Small Components of fittings, ancillaries	
RG4	1	ID < 80 mm (domestic installations, buildings)	0.02
RG4	2	80 mm ≤ ID < 300 mm (service piping)	0.01
RG4	3	ID ≥ 300 mm (mains piping)	0.005
	E	Storage systems (reservoirs)	
RG1	1	In domestic installations, buildings, water volume < 10 l	4
RG2	2	In domestic installations, buildings, water volume ≥ 10 l	2
RG2	3	In water supply	1
	F	Components of storage systems	
RG2	1	In domestic installations, buildings, water volume < 10 l	0.4
RG3	2	In domestic installations, buildings; water volume ≥ 10 l	0.2

RG3	3	In water supply	0.1
	G	Small Components storage systems	
RG3	1	In domestic installations, buildings; water volume < 10 l	0.04
RG4	2	In domestic installations, buildings; water volume ≥ 10 l	0.02
RG4	3	In water supply	0.01

Table 5: Overview Risk group, Product group and Conversion factor for non-metallic materials

Note: RG1 is the highest risk group, RG4 is the lowest one.

References:

Materials	Reference
Organic	Table 1, Annex I, CID (EU) 2024/368
Final cementitious	Table 1, Annex III, CID (EU) 2024/368
Final enamels, Ceramic, and other inorganic	Table 1, Annex IV, CID (EU) 2024/368

Table 6: References to Risk Group for non-metallic materials

4.1.2.2 Product Group

According to the use of the metallic products or components, determine the product group by using the following table (extract from table 2, Annex II, CID (EU) 2024/365)

Product Group	Examples of metallic products or components
A	Pipes
B	Fittings, ancillaries in buildings installations
C1	Components of products of Product Group B
C2	Fittings, ancillaries in water mains and water treatment works with permanent flow
D	Components of products of product group C2

Table 7: Product groups for products from metallic materials

Product Group A is the highest product group (metallic pipes), Product Group D is the lowest one. This principle is valid for fully metallic products and brings the information how the product must be assessed (see clause 4.3.3 Conformity testing).

4.1.3 Collection of required information

The proposed documentation, which is the basis for the application file, serves as an example. The documentation can, depending on the manufacturer and product, look completely different, but the content shown in the example should be available. It can be one large document or different smaller documents in different forms:

- Table
- Text document
- Information listed on the drawing
- Database

With the application for a product certificate a drawing of the (assembled) product should be provided. In some applications it might be useful to highlight the wetted surfaces, which are intended to come into contact with water intended for human consumption. (Different examples

can be found in ‘ANNEX 5 Calculation of wetted surfaces’ in this document.) The components could be marked with a number to be able to reference to them in a list, which is required for the calculation of the wetted surfaces of the single components.

The total wetted surface of the product, for which the application is prepared, is the reference for calculation (see ‘ANNEX 4 Examples of different products and product groups’).

The application file, which is required for the application, must necessarily contain the wetted surfaces and the materials used for the product/ product components. Those are prerequisite to assess the product and the different risk groups / product groups of the components.

Each component is listed with its wetted surface. (Here: No real product, just for explanation purpose! It is a product with a connection < 80 mm, for domestic installation.)

A	B	C	D	E	F	G	H
Position	Designation	Material type	Material designation	Quantity	Wetted surface [e.g. cm ²]	Wetted surface [%]	RG or PG
1	Tube	Organic	POM XYZ	2	502,41	46,78	RG 2
2	Gasket	Organic	EPDM II	4	16,40	1,53	RG 3
3	Connector	Organic	POM AA	1	162,63	15,28	RG 2
4	Screw	Metal	1.4301	2	4,15	0,39	PG C1
5	Housing	Metal	CW727R-DW	1	384,67	35,82	PG B
6	Nipple	Organic	POM MMM	1	3,64	0,34	RG ! Not 4 but 2 ! *)
	TOTAL				1073,9		

Table 8: Example product documentation with wetted surfaces

*) due to summation rule. Further explained in chapter below.

- Column A Position: contains the number of the component, where it can be found in the drawing (= component marked with number).
- Column B Designation: contains the designation of the component
- Column C Material Type: contains the material type such as metal, organic, ceramic, cementitious.
- Column D Material Designation: requires the clear material name.
- Column E Quantity: states how often a component is used. Alternatively, this column is left out and the components are listed as often as they are used per product.
- Column F Wetted surface: Contains the wetted surface in any square area (mm², cm², dm², m²), appropriate unit to be chosen dependent on the product/ total wetted surface. Total wetted surface per component already multiplied by the quantity used per product. Alternatively, the components are listed separately as often as used per product and added later.
- Column G Wetted surface: describes the wetted surface in relation to the complete wetted surface in %.
- Column H RG or PG: if risk group or product group are applied depending on material type. The classification itself depends on the surface or “summation of surface” (details in clause ‘4.1.6 Summation rule’).

Additional information, which can be relevant for the assessment of the product, can, for example, be the handling of alternative materials or integration of sub-assemblies/ assembled products.

The following, extended table shows options how those issues could be handled:

A Position	B Designation	C Material type	D Material designation	E Quantity	F Wetted surface [e.g. cm ²]	G Wetted surface [%]	H RG or PG
1	Tube	Organic	POM XYZ	2	2512,48	41,72	2
2	Gasket	Organic	EPDM II	4	16,40	0,27	3
2		Organic	EPDM KK				
2		Organic	HNBR OO				
3	Connector	Organic	POM AA	1	162,63	2,7	2
4	Screw	Metal	1.4301	2	5,6	0,09	C1
5	Housing	Metal	CW727R-DW	1	384,67	6,39	B
6	Nipple	Organic	POM MMM	1	4,78	0,08	! Not 4 but 2 ! *)
7	Ball valve						
7.1	Housing	Metal	1.4404	1	576,54	9,57	C1
7.2	Ball	Organic	PTFE 1	1	658,35	10,93	2
7.3	gasket	Organic	EPDM HL	3	22,60	0,37	4
8	Pump	assembly	multiple	1	1678,90	27,88	2
	TOTAL				6022,95	100	

Table 9: Extended example product documentation with wetted surfaces containing certified assemblies

*) due to summation rule. Further explained in chapter below.

- Position 2 This position is an example to identify alternative materials. This shows that each of these materials could be used as an option for the certified product.
- Position 7 This position shows how non- certified sub-assemblies could be listed. Positions 7.1, 7.2, 7.3, are the components of the sub-assembly/assembled product no. 7.
- Position 8 This position shows how certified sub-assemblies (product/component) can be listed. If it is certified according to the required risk group, it is sufficient to indicate the total wetted surface of the sub-assembly.

4.1.4 Material list

To have a good overview, it is proposed to list all materials used for the product (family) intended to be certified. In this overview, the applicable certificates (materials/products/pre-products) can be listed.

Material type	Material designation	Certificate	Validity	Max product group/ risk group
Organic	POM 123	XXXXX		
Ceramic	Al2O3 ABC	YYYYY		
Metal	1.4408	-		

Table 10: Example material overview with certificates

For certified components an additional overview can be created, or the information can be added in the product list under '4.1.3 Collection of required information'.

Certified Component	Manufacturer	Certificate	Validity	Max product group/ risk group
Pump	ZZZZ	XXXXX	##/##/####	

Table 11: Example certified component overview

4.1.5 Supplier list

If necessary, e.g. for better overview, an additional table can be created which contains a supplier overview. (Alternatively, this information can also be added to the table under '4.1.3 Collection of required information')

Material type	Material designation	Supplier	Additional information (e.g. address)
Organic	POM 123	XXXXX	
Ceramic	Al2O3 ABC	YYYYY	
Metal	1.4408	-	

Table 12: Example supplier overview

4.1.6 Summation rule

Part No.	PART	Qty	MATERIAL	% Wetted surface	RG single component	RG after summation**
1	Body	1	Metal 1	41.0%		
2	Slider	1	Plastics 1	0.7%	4	2
3	Seal	1	Elastomer 1	0.1%	4	3
4	Screen	1	Metal 2	1.5%		
5	Control slider	1	Ceramics 1	0.5%		
6	Control disc	1	Ceramics 2	1.7%		
7	Gasket	1	Elastomer 1	0.7%	4	3
8	Bottom	1	Plastics 2	7.0%	3	3
9	Seal	2	Elastomer 1	0.1%	4	3
10	Seal	1	Elastomer 1	0.3%	4	3
11	Adaptor	1	Plastics 3	25.3%	2	2
12	Flow regulator	1	Plastics 1	1.6%	3	2
13	Slider	1	Plastics 1	1.8%	3	2
14	Seal	2	Elastomer 1	1.1%	3	3
15	Seal	2	Elastomer 1	0.5%	4	3
16	Mousseur	1	Assembly Group	9.2%		
17	Water Guide	1	Plastics 1	5.1%	3	2
18	Water Guide	1	Plastics 1	1.8%	3	2
				100.0%		

Table 13: Example summation rule for organic materials

Material	% Wetted surface	Risk Group
Plastics 1	11.0%	RG 2
Plastics 2	7.0%	RG 3
Plastics 3	25.3%	RG 2
Elastomer 1	2.8%	RG 3

Table 14: Summed wetted surfaces of organic materials

The different organic materials (here mentioned as plastics 1, 2, 3 and Elastomers 1) are summed up according to their same main polymers, such as PE (polyethylene), PA (polyamide), POM (polyoxymethylene), PPE (polyphenylether), EPDM (ethylene propylene dien monomer), NBR (nitrile butadiene rubber).

The same rules apply for ceramic, enamel and inorganic materials (like glass) for the same (final) material, which can be linked to a specific EUPL number.

The different metallic materials are summed up according to the same EUPL number.

4.1.6.1 Exemption for certain components made from organic materials

Under certain conditions, the Supporting Document provides for a summation procedure that deviates from the regular procedure for some constellations, which leads to a reduced testing effort in the context of annual audits.

Requirements for reduced testing:

If the wetted surface fraction of all components of the same main polymer is $\geq 10\%$ of an assembled product, the conformity assessment procedure according to module combination B and D (as set out in Annex II to Decision No 768/2008/EC) is not generally and mandatorily applicable for all components if it can be demonstrated during the type examination for all components (e.g. by a pre-product certificate) that the test requirements and acceptance criteria according to RG 2 are fulfilled, whereby the conversion factor of the corresponding product group must be applied.

Exemption 1:

If the wetted surface fraction is $< 10\%$ for all individual components, the conformity assessment procedure according to module combination B and D has only to be applied for the component with the largest wetted surface fraction. An Example for this case is given in Annex 7 of the Supporting Document and illustrated below.

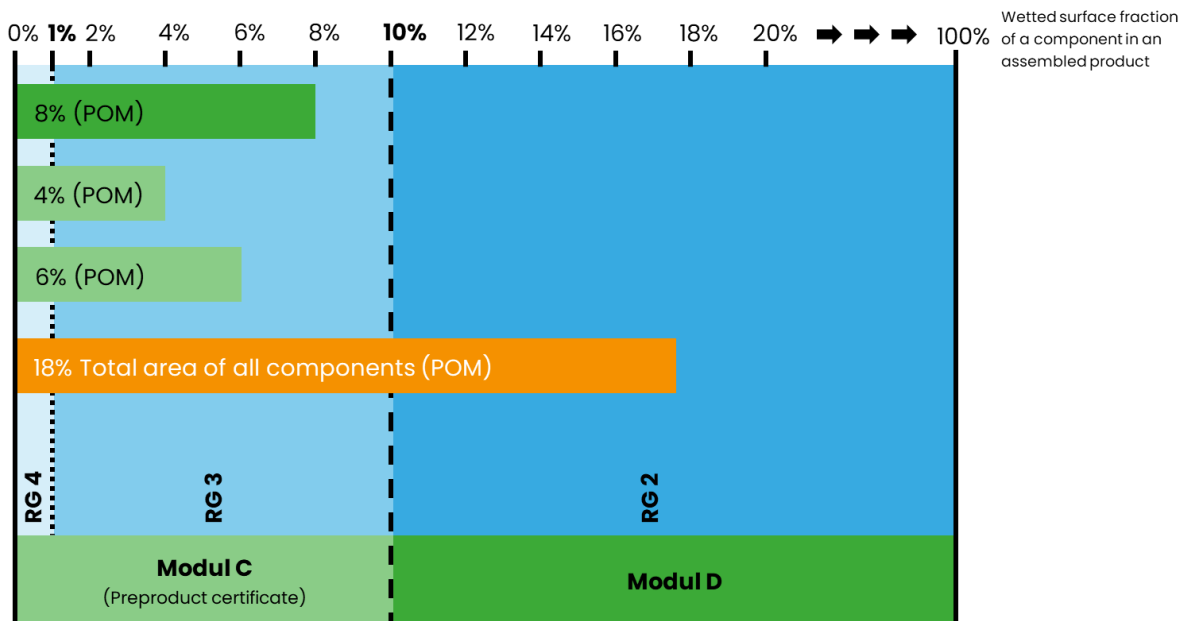


Figure 2 Exception 1 Summation procedure

Exemption 2:

If the wetted surface fraction of one or more components is $\geq 10\%$, the conformity assessment procedure according to module combination B and D has to be applied for these components, but not for components with a wetted surface fraction of $< 10\%$. See illustration below.

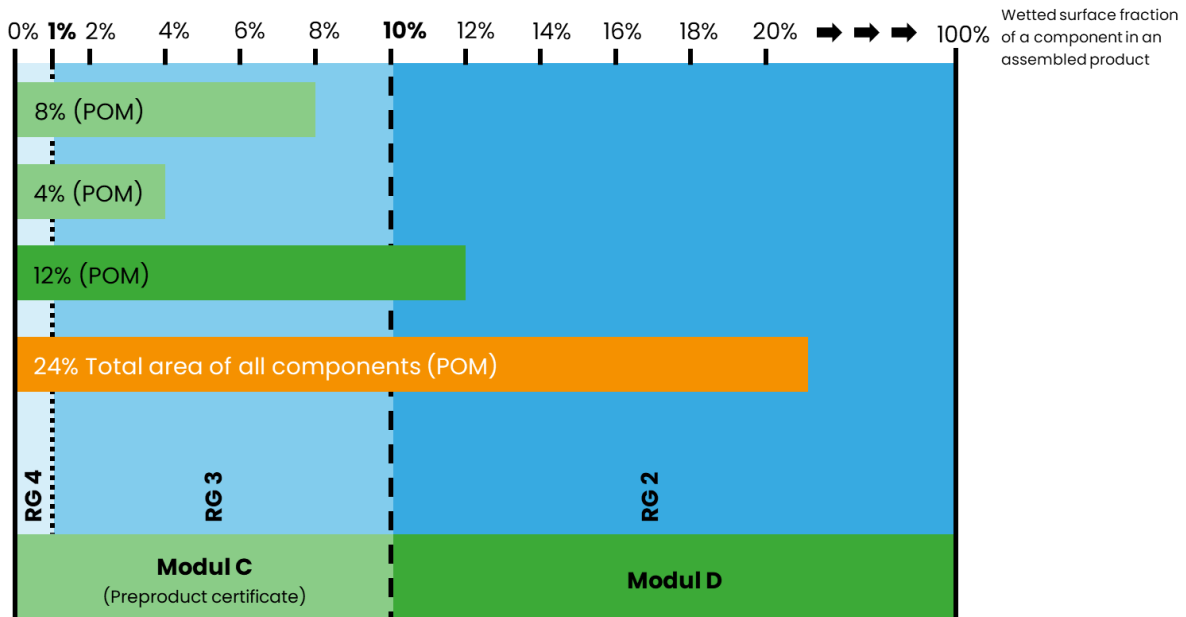


Figure 3 Exception 2 Summation procedure

Special case 'elastomer gap and ring seals':

The surface fraction of elastomer gap or ring seals is summed up independently of other components made of the same base polymer (e.g. expansion membranes). Although in very rare cases the sum of the surface fractions of gap and ring seals in an assembled product can result

in a surface fraction of > 10 %, in these cases only the requirements of product group C and risk group 3 apply.

Only for components classified in RG1 or RG2 the conformity assessment body has to withdraw test pieces for testing according to Module B.

If components are already certified according to the correct risk group, no further testing of these components is required. In this case, the surveillance of the conformity assessment body is limited to check that the correct components are used for the production of the assembled product.

4.2 Materials

4.2.1 Overview on material requirements

The materials used in contact with drinking water for each individual component shall be determined.

4.2.1.1 Procedure for Organic materials:

Examples: plastics, rubber, EPDM, glue, binding agents, organic coatings

Main characteristics: granulate is not directly listed in the EU-PL but starting substances used for its production. Material is sensible for migration. A by-product and products issued from chemical reactions are also to be assessed so a screening for unexpected substances (GC-MS) is also requested.

In short

Determination of the main polymers used to manufacture the individual components.

4.2.1.2 Procedure for Enamels, ceramic material and other inorganic materials:

Examples: enamel, ceramic, glass, sodium silicates

Main characteristics: constituents are directly listed in the EU-PL by entry with starting substances used to manufacture the frits. Sensible for migration.

In short

Determination of the final material used to manufacture the individual components.

4.2.1.3 Procedure for Cementitious materials:

Examples: concrete, mortar

Main characteristics: organic constituents are directly listed in the EU-PL by entry with starting substances used to manufacture the frits. Sensible for migration.

In short

Determination of the final material used to manufacture the individual components.

4.2.1.4 Procedure for Metallic materials:

Examples: stainless steel, brass, copper, cast iron

Main characteristics: available material, in line with EU-PL, on the market can be used directly.

In short

Determination of the metallic compositions used to manufacture the individual components.

Table 15 Overview on material requirements

			Step 1	Step 2	Step 3	Step 4
	Determine the wetted surface area of each component and its percentage of the total product	For each individual component, the following material group must be determined	For each individual component and for each material, the following must be determined	Summation of all wetted surfaces of components	Determination of the product group and conversion factor for each (summed) surface fraction acc. to CID (EU) 2024/368	Determination of the risk group and the requirements for material testing acc. to CID (EU) 2024/368
Steps for determining test requirements	For every single component and material	Organic materials	Main polymer	Manufactured from the same polymer	Annex I, table 5	Annex I: Table 1 Section 3
		Enamels & Ceramics	Specific EUPL number	Manufactured from the same specific EUPL entry	Annex I, table 5	Annex IV: Table 1 Section 3
		Cementitious materials	Specific formulation (constituents acc. to EUPL of organic constituents of cementitious materials)	Manufactured with the same formulation	Annex I, table 5	Annex III: Table 1 Section 3
Steps for determining product requirements					Compliance with the requirements of CID (EU) 2024/365 Annex II table 2	
		Metallic materials	Relevant product group acc. to EUPL	With the same product group acc. To EUPL number (if a range is specified, only the highest is relevant)	The materials must fulfil the requirements for the respective use. The sum of the surfaces of the materials that only correspond to product group C must be less than 10% of the total wetted surface of the product group B.	

Legend:

Metallic materials = Product Group

Other materials = Risk Group

Table 16 Tips for step 3 – identification of the group for (assembled) product

Tips for step 3 – identification of the group for (assembled) product

(Source: Table 5, Annex I, CID (EU) 2024/368)

Is the product a “A. Pipes”, “B. Fittings, ancillaries”, “E. Storage systems”?

“A. Pipes” → *Is your product metallic?*

Yes, so A. / Metals: PG A

No, so A. / Others: RG 1

“B. Fittings, ancillaries” → *Is the sum of the largest identical material surface metallic?*

Yes, so B. / Metals: PG B

No, so B. / Others: RG 2

“E. Storage systems” → *Is the sum of the largest identical material surface metallic?*

Yes, so E. / Metals: PG B

No → *Is the storage system strictly less than 10 l?*

Yes, so E. / Others / <10l: RG1

No, so E. / Others / ≥10l: RG2

4.2.2 Pre-product assessment

For Risk Group RG2, test results can be used for certificate procedure with additional checks

For Risk Groups RG3 and RG4, pre-product certificates are sufficient for the assessment.

4.2.3 Database

To reduce costs and time in the certification process, an initiative, named fit4dw, was started to reduce complexity, risks and limit multiple testing on materials certification. This tool aims to ease the use of Pre-product or intermediate product certificates for (assembled) product manufacturers.

4.2.4 Sampling

Samples for testing shall be **representative** of the final material as used in the product or component that will be in contact with drinking water.

The selection of the sample shall be performed by:

- the notified body for risk groups RG1 and RG2 and product groups PG-A and PG-B.
- the manufacturer for other risk groups (RG3 and RG4) or product groups (PG-C1, PG-C2, PG-D) and sent to the conformity assessment body or its mandated testing laboratory

4.2.5 Testing

Testing will depend on the material (organic, metallic, cementitious, enamel, ceramic or other inorganic material) following a risk-based approach, so according to the product group PG for metallic material or risk group RG for the other materials.

The testing is performed as follows:

NOTE: exhaustive requirements are described in the Legal Act CID (EU) 2024/368, clause 2.1 of the annex indicated in reference.

Material	Testing	Indicative duration ⁽¹⁾	Reference
Organic	Formulation review		Annex I of the MS-guidance document
	Migration at: - cold water conditions - warm or hot water conditions Including: ➤ Relevant substances ➤ Screening for unexpected substances (GC-MS) ➤ Total Organic Carbon (TOC) ➤ Odour (TON), Flavour (TFN), Colour, Turbidity	- 31 days max - 31 days max	
	Microbial growth (EMG)	120/90 days ⁽²⁾	
Metallic	Composition review		Annex II of the MS-guidance document
	Relevant substances, so chemical analysis		
Plated products	Composition review		Annex II and clauses 6.2.2 and 6.2.3 of the MS-guidance document
	Relevant substances, so chemical analysis		
	Release of metallic elements Migration (equal to organic) at: - cold water conditions - warm or hot water conditions	Case by case - 31 days max - 31 days max	
Soldered products	Composition review including the process (temperature, chemical composition of solders, parent materials and material used to be joined and the joint)		Annex II and clauses 6.2.2 and 6.2.3 of the MS-guidance document
	Relevant substances, so chemical analysis		
	Release of metallic elements Migration (equal to organic) at: - cold water conditions - warm or hot water conditions	Case by case - 31 days max - 31 days max	
Cementitious	Formulation review		Annex III of the MS-guidance document
	Migration (equal to organic) at: - cold water conditions - warm or hot water conditions	- 31 days max - 31 days max	
	Microbial growth (EMG)	90 days	
Enamel, ceramic and other inorganic	Composition review		Annex IV of the MS-guidance document
	Relevant substances, so chemical analysis		
	Migration at: - cold water conditions - warm or hot water conditions Including: ➤ Relevant substances	- 31 days max - 31 days max	
(1) indicative duration for testing, without administrative work			
(2) Dependent on method			

Table 17: testing on materials and indicative duration

Recommendation for testing procedure

Start with screening for unexpected substances (GC-MS) testing to avoid a second iteration.

Results obtained through EN12873-1 are expressed as a migration rate. This migration rate is converted into the expected migration of the substance at the tap using the conversion factor of the table 5 of annex I of CID (EU) 2024/368. The general principle of the conversion factor is described in the 'ANNEX 2 The Principle of Conversion Factors'.

4.3 Certification

4.3.1 Identification of third party notified body

Identify 3rd Party Notified Body

Use [NANDO](#) EU official website to find the relevant notified bodies

A notified body is a conformity assessment body that has been notified in accordance with Article 5 of CDR (EU) 2024/370.

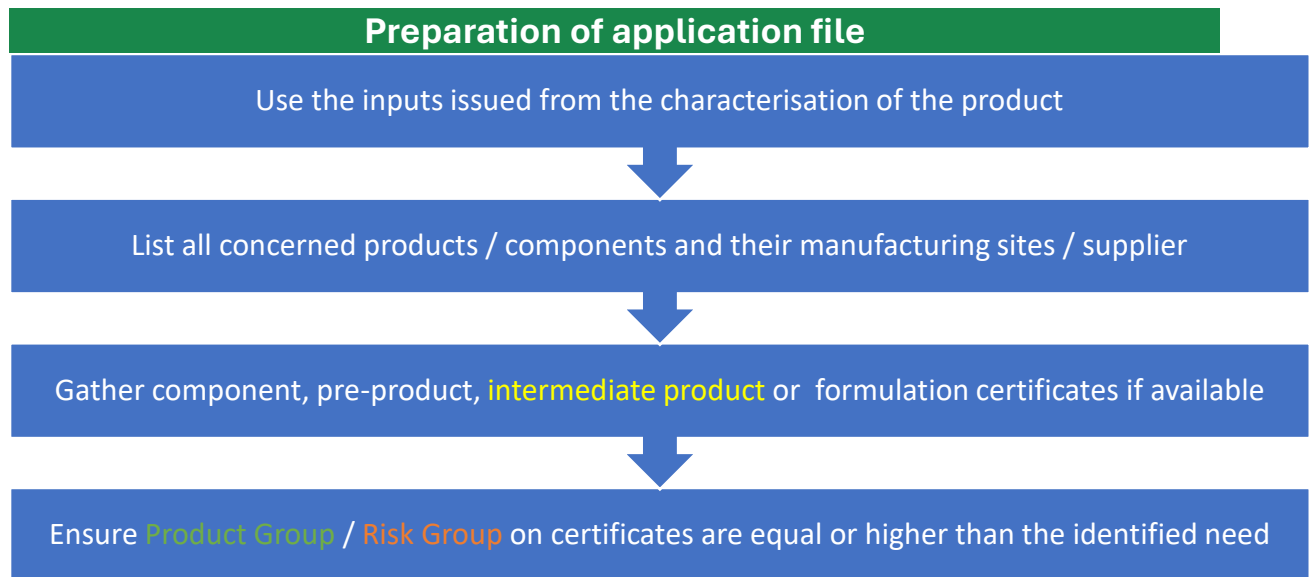
The new European system is based on a certification system for products in contact with water intended for human consumption. The certificates are issued by notified and accredited conformity assessment bodies and will be valid for the entire EU market. Probably not all Member States will have notified conformity assessment bodies. The manufacturers have the choice of conformity assessment body and can use any notified conformity assessment body.

Notified bodies perform the conformity assessment for the products to be placed on the market. Notified bodies can take the responsibility of the complete activity (tests, inspection and certification) or can delegate some activities, like tests, to an external laboratory (accredited by the concerned notified body).

The list of notified bodies is available on the following webpage:

<https://webgate.ec.europa.eu/single-market-compliance-space/notified-bodies/by-legislation>

4.3.2 Preparation of application file



Legend :

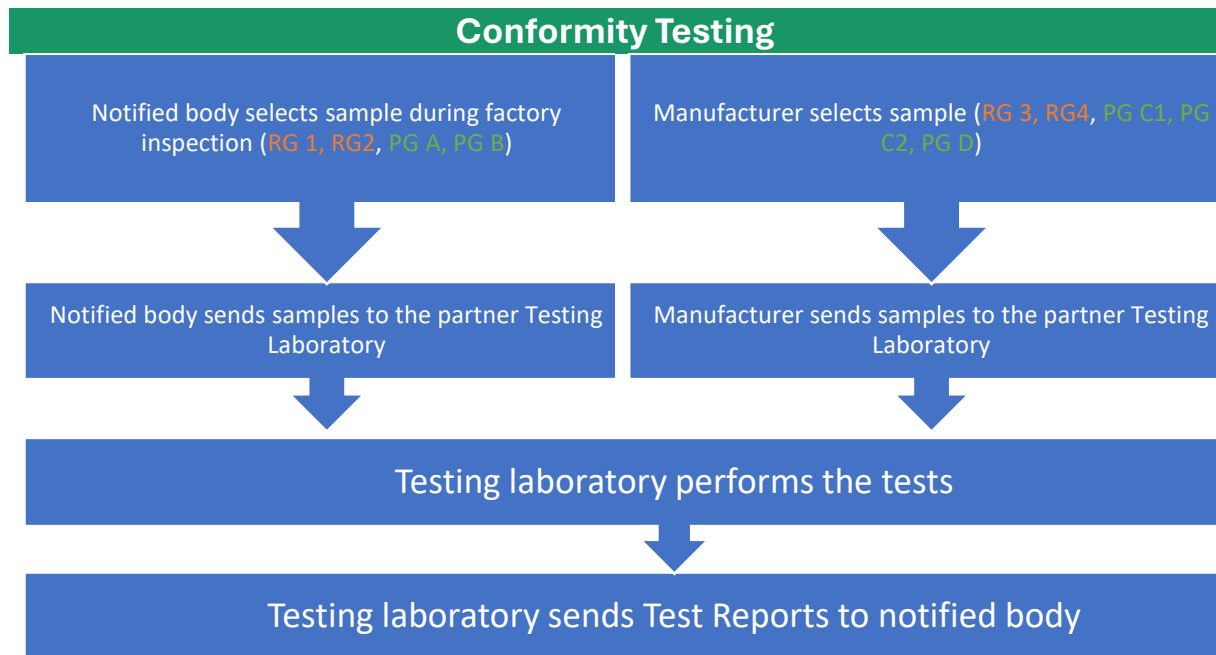
Metallic materials = Product Group

Other materials = Risk Group

The application file must be prepared and must be shared with the notified body. It's possible to group in one certificate, so in one application file, several products (by family for example, see chapter 5.4.3.2 of the MS-Guidance Document). To build this file, it's needed to:

- 1) Use the inputs issued from the characterization of the product (see chapter 4.1.1 Characterization of the product)
- 2) List all concerned products / components, their manufacturing sites / supplier, the material of each one and the wetted surface (the list of expected information is available in the MS-Guidance Document, clauses 5.4.2 and 5.4.3)
- 3) Gather component, pre-product, intermediate product or material certificates.
- 4) Ensure information indicated on certificates are of a sufficient level (Risk Group / Product Group equal or higher than the identified need, cold and hot temperature consistent with the need, hardness of the elastomer part,)

4.3.3 Conformity testing



Legend :

Metallic materials = Product Group

Other materials = Risk Group

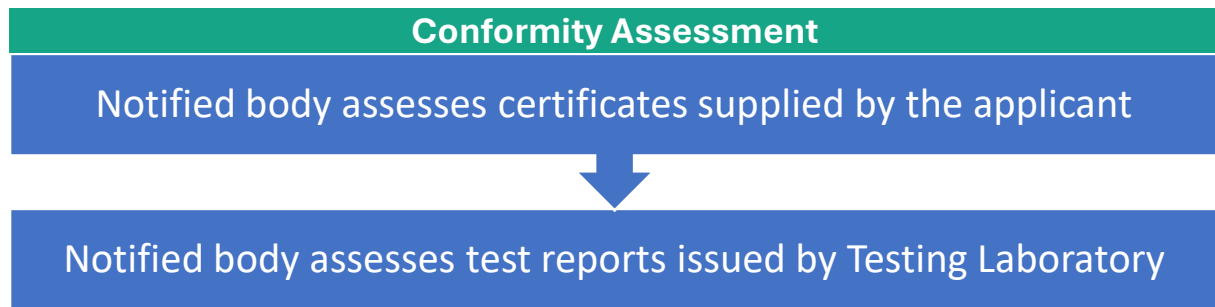
The risk-based approach is a fundamental principle and implemented for testing (CID (EU) 2024/368) and conformity assessment (CDR (EU) 2024/370). All explanations are available in the MS-Guidance document, clause 5.2.

The testing might be performed either for each component or for the complete assembled product. However, now no European testing standards (EN) for testing of the complete assembled products are available. For this reason, CID (EU) 2024/368 and this version of this guidance document is limited to the description that each component, which can be disassembled from the assembled product, shall be tested and assessed separately. A standard for testing a complete assembled product is in development at CEN level.

According to the risk-group/product group of each component, the samples collection is not done in the same way. For product/component belonging to RG1, RG2 or PG-A, PG-B, the samples collection is done by the notified body during the annual factory inspection. For product/component belonging to RG3, RG4 or PG-C1, PG-C2, PG-D, the samples collection can be done by the manufacturer. Samples collected by the notified body or by the manufacturer are sent to the testing laboratory, that performs the tests and sends tests reports to the notified body.

As also the testing lies within the responsibility of the notified body, the designation of the testing laboratory is subject to the choice of the notified body. It may be possible that the applicant agrees with the notified body on a laboratory.

4.3.4 Conformity assessment

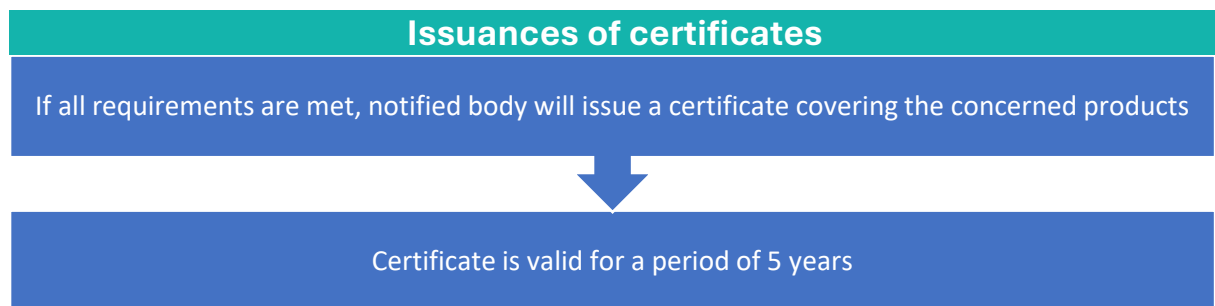


The manufacturer shall provide the notified body with the application file and all component certificates that are not directly collected during the annual inspection.

The notified body assesses the validity of all certificates received from the manufacturer and all test reports received from the testing laboratory.

If all components are certified according to the correct risk group, no further testing of these components is required.

4.3.5 Issuances of certificates



If all requirements are met, the notified body will issue a certificate covering the concerned products.

All requirements met means an application file validated by the notified body, tests passed for all concerned components (and test reports sent to the notified body), component certificates valid for the needed application and annual inspection done (see next chapter).

The certificate delivered by the notified body can cover one product, a product type series or components, and is valid for 5 years.

The manufacturer declaration of conformity is considered valid during the period of validity of the third-part certificates.

To maintain the validity of the certificate:

- For products/components from the RG1&2: samples are collected and tested every year after the annual audit. So, migration test is done every year.
- For products/components from the RG3&4: annual migration tests are not legally mandatory but might be carried out by the manufacturer of the component as part of the internal quality assurance procedure.

- For all products/components: all modification (component or material modifications, suppliers change...) must be communicated to the notified body (or along the supply chain in case of component suppliers).

4.3.6 Audit

4.3.6.1 Initial audit

For products or components of **RG1 & RG2** (**PG-A & B** for metallic materials), the manufacturers shall operate quality system for production, final product inspection and testing. This system must address specifically the requirements according to CID (EU) 2024/368 and must be approved by the notified body.

The inspections are intended to survey the quality assurance of the production process. The initial inspection has the purpose to assess the manufacturer's quality system, to verify that the products are in accordance with the technical documentation, to ensure that the information provided by the manufacturer is complete and to withdraw, identify and seal the samples for the tests according to CID (EU) 2024/368.

During the initial audit, the following points are checked and discussed:

- Manufacturing process (verification of the incoming materials, storage conditions of the materials and the product, possible pollutants throw the cycle)
- Availability, adequacy and maintenance status of the production equipment
- Non-conformity and complaints management
- Quality records
- Measuring instruments and testing equipment management related to drinking water aspects
- Company laboratory and internal test procedures
- Training and authorisation records of the staff
- Marking on the product, its packaging and document

The initial inspection shall be made in presence. Also, the planning, document review and report writing is part of this inspection.

If the manufacturer uses multiple production sites for the manufacturing of products subject to certification, the initial inspection is carried out at each of these sites.

The check list for audit report shall be filled by the notified body during the inspection visit. An example for the check list is given in Annex 3.1 check list example for initial audit.

The result is a signed initial inspection report which is countersigned by the manufacturer.

4.3.6.2 Annual audit

The annual inspection has the following purpose:

- to re-assess the manufacturer's quality system;
- to verify the maintenance of the characteristics of the product against the applicable certification scheme;
- to withdraw, identify and seal test pieces for the reduced testing of the products. A complete testing of the samples according to CID (EU) 2024/368 is only required every 5th year. In-between this period a reduced testing shall be performed. For organic and cementitious/enamel/(non-metallic) inorganic materials still a migration test according to

CID (EU) 2024/368 is required. However, the migration waters only must be analysed for TON, TFN, colour, turbidity and TOC.

- For metallic materials, a composition test or an acceptance test certificate 3.1 in accordance with EN 10204 is required from the supplier.

If the manufacturer uses multiple production sites for the manufacturing of products subject to certification, the annual inspection, if deemed necessary, is carried out at each of these. In any case, each one of the multiple production sites shall be checked at least once during the validity of the certificate.

As a result of the annual inspection a specific Audit report is prepared, specifying recommendations or non-conformities and indicating the adequacy or inadequacy of each applicable item. The manufacturer is given a copy of the Audit Report as a notification of the operation.

4.3.7 Practical implications for manufacturers

This chapter does not address the audit of the conformity assessment body at the product manufacturer, but instead aims to inform the manufacturer about necessary considerations to meet hygiene audit requirements. Hygiene audits are applicable to all products covered by Module D of Regulation 768/2008/EC, which includes products in risk groups 1 and 2 as well as product groups A and B. Additionally, products subject to Module C of Regulation EC/768/2008 must comply with quality management system requirements, but these are not verified through external audits. Nevertheless, this chapter should help those manufacturers as well to get guidance for their internal processes.

4.3.7.1 Internal Processes and Quality Management Systems in Production Sites

There is no universal procedure that applies to all manufacturers and products. Instead, advice and support are highly dependent on several factors:

- The specific product
- The respective manufacturer
- The location of the manufacturer

Therefore, a bilateral agreement between the manufacturer and the notified body is essential to address the unique requirements and circumstances.

It is important to note that while having an ISO 9001 certification can simplify the audit process, it is not a mandatory requirement. The presence of processes and certificates can streamline aspects of the audit, ensuring that some elements are no longer checked, leaving primarily hygiene-specific items outstanding. However, manufacturers should still ensure that all other necessary hygiene and quality management requirements are met, regardless of whether they hold an ISO 9001 certification. If there is more than one production site, where products intended for drinking water are produced, it is not sufficient to assess the process of one production site. All the respective production sites need to fulfill the process requirements and, if applicable, an external auditing will be done. The initial audit will be done at all manufacturing premises, whereas the periodic audit could be done in a rotation mode, which is defined by the notified body.

4.3.7.2 Assessment of the Current Status in the Production Site

To ensure a comprehensive understanding of a production site's current status, an initial assessment should be conducted. This involves a thorough review of the entire production process, from the receipt of raw materials to the delivery of finished products. The assessment

should focus on identifying any gaps in compliance with the industry standards and regulations, particularly those related to hygiene and quality management, including complaint management.

4.3.7.3 Goals to be Achieved

To meet the stringent requirements set forth in the EU DWD and its relevant legal acts, manufacturers need to focus on the following key areas:

- Documentation: Maintaining comprehensive records of all processes and procedures.
- Internal auditing: Conducting initial and regular internal audits to manage existing processes, which will be assessed during external auditing, if applicable.

The EU DWD emphasizes the importance of regular audits for products falling in Risk group 1 or 2 or Product group A or B. These audits not only verify compliance but also help in identifying areas for improvement. Regular audits ensure that any changes in the production process and design, especially those related to hygiene, are properly documented and managed. Products for which no external audit is applied, must be internally managed by the manufacturer of this product by a properly working Quality Management System.

4.3.7.4 Minimum Requirements for internal Documentation

Proper documentation is crucial for maintaining the integrity and traceability of the production process. The following areas must be thoroughly documented:

- Incoming Goods: Records of all incoming materials, including their source, quality checks, and any certificates.
- Process Parameters: Detailed documentation of the production parameters, ensuring consistency and quality in the final product.
- Qualification of Employees: Documentation of the qualifications and training of personnel involved in production. This is already covered, if the company holds ISO 9001 certification.

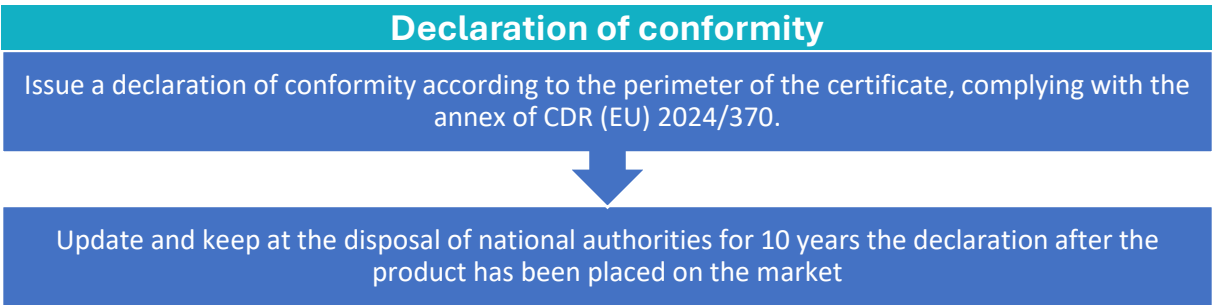
4.3.7.5 Experience from National Hygiene Audits

In some cases, national hygiene audits provide valuable insights into the effectiveness of the quality control measures in place already and experience of some producing manufacturers is existing already. Key aspects of these audits include:

- Quality Control: Ensuring that all products meet the required standards before they are placed on the market.
- Check of Production Parameters: Regular monitoring and verification of the production parameters to maintain product consistency.
- Check of Storage, Stock, and Incoming Goods: Ensuring proper storage conditions, maintaining the traceability, and verifying the quality of incoming goods.
- Withdrawal of Parts: For parts falling under Module D, as referenced in Annex 5, section 2.3 of the MS-guidance document, withdrawal of parts is done by the auditor.
- Certificates: storing all relevant certificates.

In conclusion, manufacturers must adopt a diligent approach towards the assessment, documentation, and auditing of their internal processes. By adhering to the guidance documents and ensuring regular audits, they can maintain high standards of hygiene and quality in their production sites and are well prepared for the hygiene audits which are mandatory for products in the highest risk groups/ product groups.

4.4 Declaration of conformity



Where compliance of a product with the applicable minimum hygiene requirements has been demonstrated by the conformity assessment procedure, **manufacturers**, or their authorised representatives, **shall draw up an EU declaration of conformity**, which should be part of the product documentation.

By drawing up the EU declaration of conformity, or by having it drawn up by its authorised representative, the manufacturer, assumes responsibility for the compliance of the product with the minimum hygiene requirements.

The declaration of conformity shall be translated by the manufacturer, or its authorised representative, into the language or languages required by the Member State in which the product is placed on the market. The format and content of the document shall be as following Annex of CDR (EU) 2024/370:

ANNEX

EU DECLARATION OF CONFORMITY

1. Product No (unique identification of the product).

2. Name and address of the manufacturer and, where applicable, its authorised representative:

3. This EU declaration of conformity is issued under the sole responsibility of the manufacturer:

4. Object of the declaration (identification of the product allowing traceability), including a colour image of sufficient clarity to enable identification of the product:

5. The object of the declaration described in point 4 is in conformity with:

— Commission Delegated Regulation (EU) 2024/370,

— other Union harmonisation legislation where applicable.

6. References to the specifications in relation to which conformity is declared:

7. The notified body (name, number) performed (description of intervention) and issued the certificate (number).

8. Additional information:

Signed for and on behalf of:

(place and date of issue):

(name, function) (signature):

Figure 4 Declaration of conformity

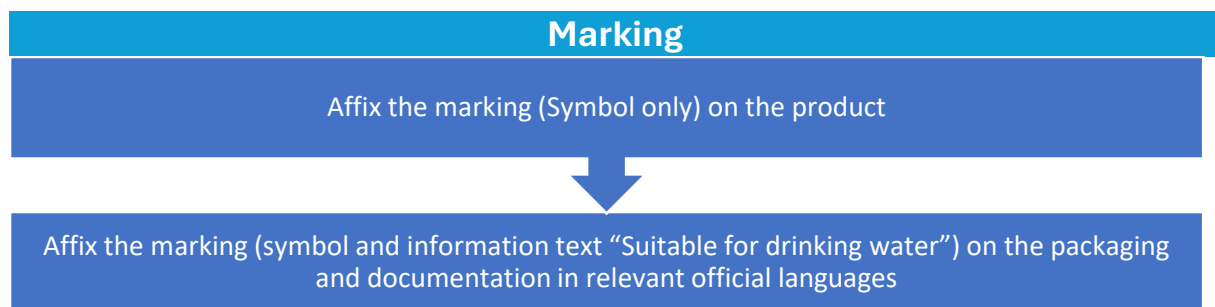
For products of RG1 and RG2 (product group A & B for metallic materials) the EU declaration of conformity is based on the certificate issued by the conformity assessment body, which is covering the Modules B + D assessment.

For products of RG3 and RG4 (product group C & D for metallic materials) the EU declaration of conformity is based on the certificate for the type examination issued by the conformity assessment body (Module B) and the declaration of the manufacturer for the internal production control (Module C).

According to decision No 768/2008/EC Annex II Module C paragraph 3.2. and Module D paragraph 5.2.:

- The manufacturer shall draw up a written declaration of conformity for each product model.
- Keep it at the disposal of the national authorities for 10 years after the product has been placed on the market.
- A copy of the declaration of conformity shall be made available to the relevant authorities upon request.

4.5 Marking



4.5.1. Definition

As a result of the EU declaration of conformity, the manufacturer shall mark the respective product as described below. The intention of the marking is that water suppliers, plumbers, authorities, wholesalers, retailers but also consumers can easily identify products complying with the requirements according to CDR (EU) 2024/370.

By affixing the marking the manufacturer declares on his sole responsibility that the product conforms to article 11 of DWD, and that the appropriate conformity assessment procedures according to CDR (EU) 2024/370 have been successfully completed.

4.5.2. Products affected by marking

All products intended to be used in contact with water for human consumption shall be marked with the following symbol.



Figure 5 EU Drinking Water Symbol

The symbol shall be

- at least 5 mm high,
- indelible and visibly affixed to one or more surfaces of the product,
- on any technical and administrative documents accompanying the product (the 'documentation') **and**
- on the packaging of the product.

Where the symbol of the minimum size cannot be affixed on the product, it shall be affixed to the packaging and to the documentation. In the following cases the symbol does not need to be affixed on the product:

- The product is too small to affix the symbol in the required size
- The product is sold as spare part for assembled products
- The product is made of a material that does not provide adhesion, e.g. liquid sealants.
- The product is of a shape that does not allow to affix the symbol correctly
- The product's function is hampered by affixing the symbol.

However, in these cases the marking shall be affixed on the packaging and shall be printed in the documentation.

In case of products where the aesthetic is hampered by affixing the symbol, the symbol can be affixed in a position, which is not visible after installation. When also this option is not practicable, then the symbol can be affixed by using a sticker directly applied on the product.

Location

The symbol must be affixed on the surface, regardless, if visible after installation.

If components are produced by the manufacturer of the assembled product or produced specifically for the manufacturer of the assembled product these components do not have to be marked. In this case the symbol does not need to be affixed to the packaging. If these components are provided as spare parts, the marking in the documentation is sufficient.

4.5.3 Affixing of marking

The marking is affixed by the manufacturer (established inside or outside the EU), or by its authorized representative established within the EU.

4.5.4 Packaging and documentation

The marking on the packaging can be done via printing or labelling.

The symbol shall be affixed to the packaging of the product, if it exists, and at least to one of the technical documentation accompanying the product. Additionally, the marking on the packaging and on the documentation of the product shall include the following informative text:

‘SUITABLE FOR DRINKING WATER’

CDR (EU) 2024/370 Article 1 no 3.:

The information text [‘SUITABLE FOR DRINKING WATER’] shall be clearly visible and shall be placed below the symbol, in upper case and in Helvetica Bold with a minimum font size of 5 mm.

The information text affixed to the documentation shall be written in the official languages of the Member State where the product is placed on the market unless that Member State provides otherwise.

The information text affixed to the packaging shall be written in at least one of the official languages of the Member State where the product is placed on the market.

The affixing of the information text shall not negatively impact on resources and environment when placed on labels and documentation. Packaging material and label sizes shall not be increased only for the reason of adapting to the information text requirements.

Table 18 Information text in all EU languages

Member state	Official language	Text
Austria	German	FÜR TRINKWASSER GEEIGNET
Belgium	Dutch	GESCHIKT VOOR DRINKWATER
	French	CONVIENT POUR L’EAU POTABLE
	German	FÜR TRINKWASSER GEEIGNET
Bulgaria	Bulgarian	ПОДХОДЯЩ ЗА ПИТЕЙНА ВОДА
Croatia	Croatian	PRIKLADNO ZA VODU ZA PIĆE
Cyprus	Greek	ΚΑΤΑΛΛΗΛΟ ΓΙΑ ΠΟΣΙΜΟ ΝΕΡΟ
Czech Republic	Czech	VHODNÉ PRO PITNOU VODU
Denmark	Danish	EGNET TIL DRIKKEVAND
Estonia	Estonian	SOBIV JOOGIVEE JAKS
Finland	Finnish	SOVELTUU JUOMAVESIKÄYTTÖÖN
France	French	CONVIENT POUR L’EAU POTABLE
Germany	German	FÜR TRINKWASSER GEEIGNET
Greece	Greek	ΚΑΤΑΛΛΗΛΟ ΓΙΑ ΠΟΣΙΜΟ ΝΕΡΟ

Hungary	Hungarian	IVÓVÍZZEL VALÓ ÉRINTKEZÉSRE ALKALMAS
Ireland	English	SUITABLE FOR DRINKING WATER
	Irish (Gaeilge)	ÓIRIÚNACH LE hAGHAIDH UISCE ÓIL
Italy	Italian	ADATTO ALL'ACQUA POTABILE
Latvia	Latvian	DERĪGS DZERAMAJAM ŪDENIM
Lithuania	Lithuanian	TINKA GERIAMAJAM VANDENIUI
Luxembourg	French	CONVIENT POUR L'EAU POTABLE
	German	FÜR TRINKWASSER GEEIGNET
Malta	Maltese	TAJJEB GĦALL-ILMA TAX-XORB
	English	SUITABLE FOR DRINKING WATER
Netherlands	Dutch	GESCHIKT VOOR DRINKWATER
Poland	Polish	PRZEZNACZONY DO KONTAKTU Z WODĄ PITNĄ
Portugal	Portuguese	ADEQUADO PARA ÁGUA POTÁVEL
Romania	Romanian	ADECVAT PENTRU APĂ POTABILĂ
Slovakia	Slovak	VHODNÉ PRE PITNÚ VODU
Slovenia	Slovenian	PRIMERNO ZA PITNO VODO
Spain	Spanish	ADECUADO PARA AGUA POTABLE
Sweden	Swedish	LÄMPLIG FÖR DRICKSVATTEN

ANNEXES

ANNEX 1 Risk Group of products

This annex contains examples to illustrate some applications of risk group of products.

As described in the footnote of table 5 of annex I of CID (EU) 2024/368, a component:

- which wetted surface doesn't exceed 1% of the total wetted surface of a product is considered as a small component
- which wetted surface doesn't exceed 10% of the total wetted surface of a product is considered as a component

As a consequence, large wetted surfaces, i.e. exceeding 10% of the total wetted surface of a product, are assigned as a RG2.

Hint

Depending on technical standards and national legislation in the EU Member States, some devices may not be considered to be part of the domestic drinking water distribution system.

See annex 4 for examples.

ANNEX 2 The Principle of Conversion Factors

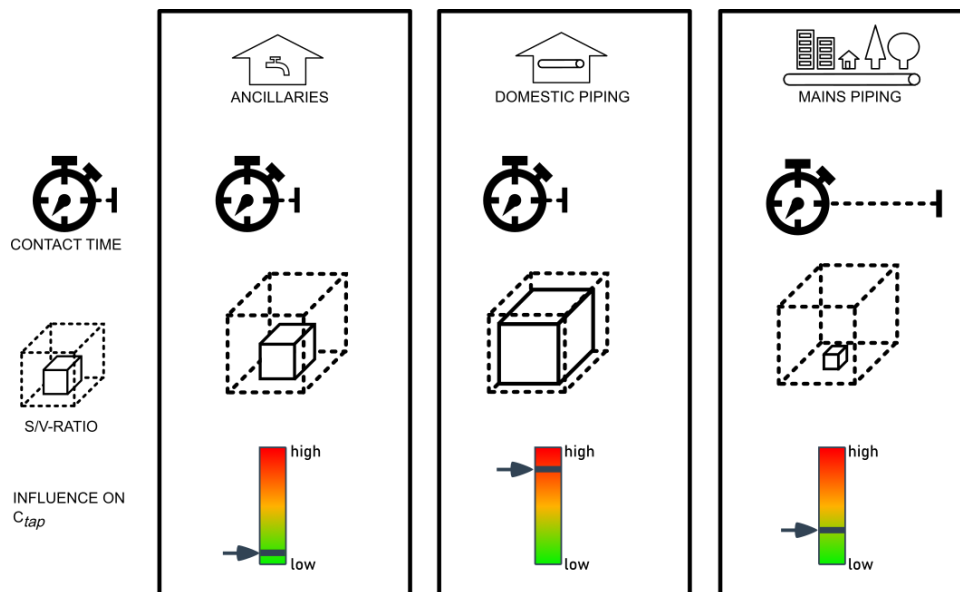
Annex 2.1 Influence of Materials on Drinking Water

Materials in contact with drinking water can influence water quality through the migration of substances into the water. The extent of migration depends primarily on two factors:

- the **surface-to-volume ratio (S/V ratio)**, meaning the size of the material's surface area in relation to the amount of water, and
- the **contact time**, i.e. how long the water remains in contact with the material.

A higher S/V ratio or a longer contact time generally increases the likelihood and extent of migration.

To ensure safe drinking water, the European Commission has established limit values in the European Positive List (EURL). These limits are defined as **Maximum Tolerable Concentrations at the tap (MTC_{tap})**. The MTC_{tap} values indicate the maximum permissible concentration of a given substance that may be present in drinking water at the consumer's tap without posing a risk to health.

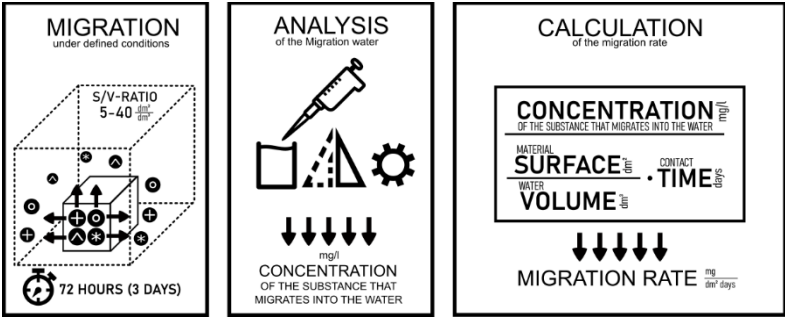


Annex 2.2 Determination of Migration Rates According to EN 12873

The determination of migration from materials into drinking water is performed under defined laboratory conditions according to **EN 12873**. The procedure consists of three essential steps:

1. **Migration Test** – Test pieces of the material are exposed to water under controlled conditions of time, temperature, and surface-to-volume ratio. This setup is designed to simulate potential migration in a standardized and reproducible way.
2. **Analysis of the Migration Water** – After exposure, the test water is analysed for substances released from the material. This provides the concentration of the migrating substance under the test conditions.
3. **Calculation of the Migration Rate** – Based on the measured concentration and the defined parameters of the test (contact time, volume, surface area), the **migration rate** of

the substance is calculated. This rate expresses how much of the substance migrates from the material per unit of surface area and time.

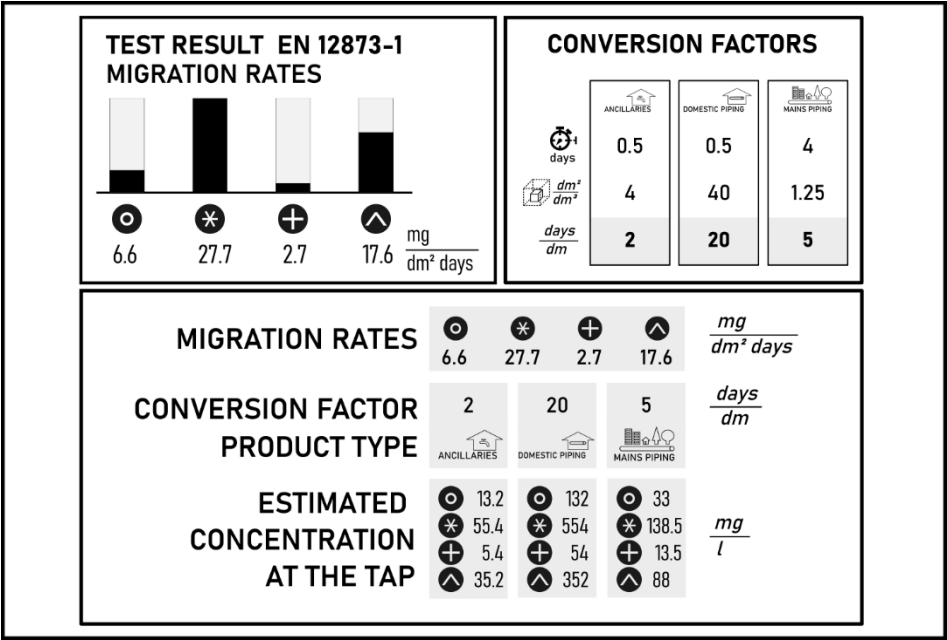


Conversion of Migration Rates into Estimated Concentrations at the Tap (Ctap)

Laboratory migration tests according to EN 12873 cannot directly reproduce the wide range of practical conditions that occur in drinking water installations. In real applications, components differ significantly in terms of their **surface-to-volume ratio** and **contact times** with water.

To bridge this gap, the measured **migration rates** from the laboratory are **converted** into estimated concentrations at the consumer’s tap (**Ctap values**). This conversion is carried out using **conversion factors**, which are derived from product- and application-specific parameters such as typical installation sizes, geometries, and water residence times.

The resulting Ctap value therefore represents a realistic estimate of the concentration of a substance that could occur in drinking water under normal conditions of use.



Annex 2.3 Compliance Check with the European Positive List (EUPL)

Once C_{tap} values have been calculated, they are compared against the **Maximum Tolerable Concentrations at the tap (MTC_{tap})** established by the European Commission in the **European Positive List (EUPL)**.

- If the calculated C_{tap} value for a substance is **below or equal to the corresponding MTC_{tap}**, the material is considered compliant for the intended use.
- If the C_{tap} value **exceeds the MTC_{tap}**, the material cannot be approved for use in drinking water applications.

This compliance check ensures that all materials and products in contact with drinking water meet the hygienic safety requirements of the Drinking Water Directive and its implementing legislation. Conformity can then be declared for specific material types or product groups.

EUPL				
SUBSTANCE	MTC _{tap}	ANCILLARIES	DOMESTIC PIPING	MAINS PIPING
○	50 $\frac{mg}{l}$	○ 50 ✓	○ 132 ✗	○ 33 ✓
✱	150 $\frac{mg}{l}$	✱ 150 ✓	✱ 554 ✗	✱ 138.5 ✓
+	20 $\frac{mg}{l}$	+	+	+
^	80 $\frac{mg}{l}$	^ 80 ✓	^ 352 ✗	^ 88 ✓
		SUITABLE	NOT SUITABLE	NOT SUITABLE

ANNEX 3 Example of quality management system (ISO 9001 + hygienic requirements)

Annex 3.1 check list example for initial audit

Company: _____

Legal Address: _____

Certification Scheme: _____

Product(s) covered: _____

ACTIVITIES CARRIED OUT BY THE AUDIT GROUP					
TYPE OF THE AUDIT	Production Facilities verified	Date	Inspector Name	Duration	SIGNATURE
☐ Initial / Renewal					
☐ Annual (1)					
☐ Annual (2)					
☐ Annual (3)					
☐ Annual (4)					

1. COMPANY'S DATA			
Company Staff	Quality Manager:	Technical Manager:	Production Manager:
	N. of employees		
Available Management System Certifications			
Available Product Certifications			

2. QUALITY MANAGEMENT SYSTEM					
Is the quality management system applied by the company. Does the company have valid certificates (e.g. ISO 9001)? In positive case, list the available management system certificates.					
Initial / Renewal		P ☐	NCM ☐	NCm ☐	RAC ☐
Annual (1)		P ☐	NCM ☐	NCm ☐	RAC ☐
Annual (2)		P ☐	NCM ☐	NCm ☐	RAC ☐
Annual (3)		P ☐	NCM ☐	NCm ☐	RAC ☐
Annual (4)		P ☐	NCM ☐	NCm ☐	RAC ☐

Annex 3.2 Information for audit

- ☐ initial inspection of factory
☐ continuous surveillance of factory production

I. General data

Reference number inspection body:	
Certification holder:	
Ordering customer:	
Manufacturer(s):	
Production facility:	
Auditor:	
Participants:	
Date of inspection:	
Date of last inspection:	

II. Product-specific details

III. Product specific details		
Product designation:		
Product's application:		
Model name:		
Distributor:		
Type	Technical specification	Remark
Used raw materials:		

Legend

a) non complaint b) Minor non-compliance c) Significant non-compliance

Questions	Assesment/ comments	Reviewed documents	Ass. a, b, c
1. QS-System QS-System			
1.1 Does the manufacturer still apply a quality management system ? Is there a valid certificate (e.g. ISO 9001)? In positive case, list all the available system management certificates.			

ANNEX 4 Examples of different products and product groups

Products and associated product groups are only examples. The product group shall be assessed thanks to the wetted surface.

RG1 Pipe, hose such as connecting hose, shower hose and pull-out hose

Use in building installations:

RG2 Backflow preventer, expansion group, , flow limiter, flow meter, hydraulic safety group, pressure safety relief device, pump, storage tank, tap, valve, water heater, water meter

RG3 Components of fittings/ancillaries identified in RG2 line (in case surface < 10%) such as membrane, O-ring, cartridge, backflow preventer or mousseur (both as part of an assembled product)

RG4 Small components of fittings/ancillaries identified in RG2 line (in case wetted surface < 1%) such as O-ring

Use in water mains and water treatment with permanent flows:

RG3 Backflow preventer, expansion group, flow limiter, flow meter, pump, reservoirs, tap, valve, water meter

RG4 Components of fittings/ancillaries identified in RG2 line, membrane, O-ring, anti-pollution check valve

RG4 Small components (O-ring) of fittings/ancillaries identified in RG2 line

ANNEX 5 Calculation of wetted surfaces

Annex 5.1 Sanitary tap

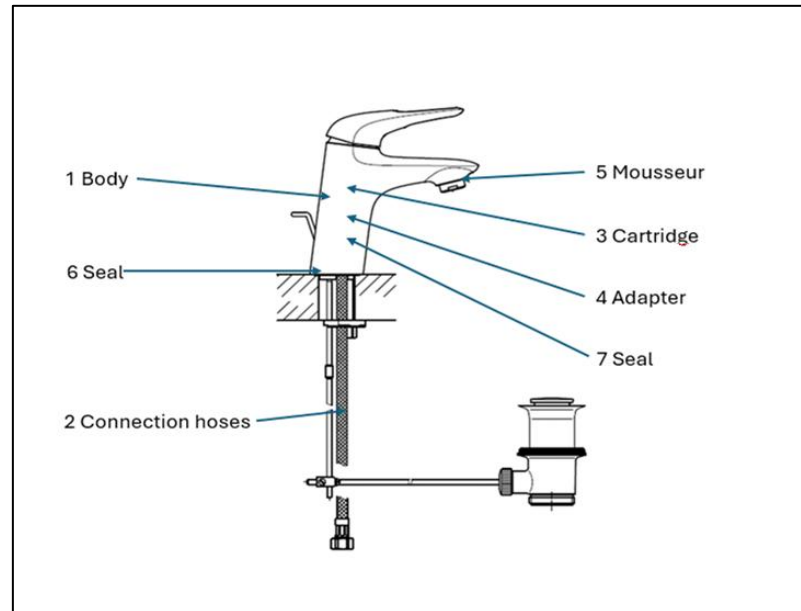


Figure 6: Sanitary tap

Schedule of materials/Calculation								
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Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface
1		Body	1	Cast brass	20 571		38.08%	
2		Connection hose	2	Assembly group	18 118		33.54%	
3		Cartridge	1	Assembly		3 074	0.00%	
	3.1	Slider plate	1	Plastic 1	560		1.04%	
	3.2	Seal	1	Elastomer 1	166		0.31%	
	3.3	Ceramic disc	1	Ceramic 1	574		1.06%	
	3.4	Ceramic disc	1	Ceramic 1	1 172		2.17%	
	3.5	Cartridge bottom	1	Silicon	602		1.11%	
4		Adapter	1	Plastic 2	7 056		13.06%	
5		Mousseur M24x1	1	Assembly group	4 646		8.60%	
6		Seal	2	Elastomer 1	422		0.78%	
7		Seal	2	Elastomer 1	140		0.26%	

Step 1 : Assembled Product Risk Grouping, acc. to (EU) 2024/368, table 5 38,08 % metal is the largest wetted surface determining the Risk Group Metal PG B so RG 2 and Module D			
Step 2 : Individual Material Risk grouping			

Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
B		B+D	
	RG 1	B+D	Connection hose defined as pipe, RG1. Complete pipe as assembled product including connections and sealings. Purchased as certified assembled product
			Non certified component
	RG 3	B+C	
	RG 3	B+C	Summation rule applied: Elastomer 1 Pos.3.2 + Pos.6 + Pos.7 >1%: RG3
	RG 3	B+C	Summation rule applied: Ceramic 1 Pos.3.3 + Pos.3.4 >1%: RG3
	RG 3	B+C	Summation rule applied: Ceramic 1 Pos.3.3 + Pos.3.4 >1%: RG3
	RG 3	B+C	
	RG 2	B+D	
	RG 3	B+C	Purchased as certified assembled product RG 3 (in case 10% wetted surface fraction is exceeded, this must be classified as RG 2)
	RG 3	B+C	Summation rule applied: Elastomer 1 Pos.3.2 + Pos.6 + Pos.7 >1%: RG3
	RG 3	B+C	Summation rule applied: Elastomer 1 Pos.3.2 + Pos.6 + Pos.7 >1%: RG3

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
				Total :	54 027		100%					

General remark: if a cartridge is used in an assembled product with a wetted surface larger higher than 10%, the Risk Group might change.

Because it is not a purchased certified product, the summation of Elastomer 1 is applied.

Annex 5.2 Water meter

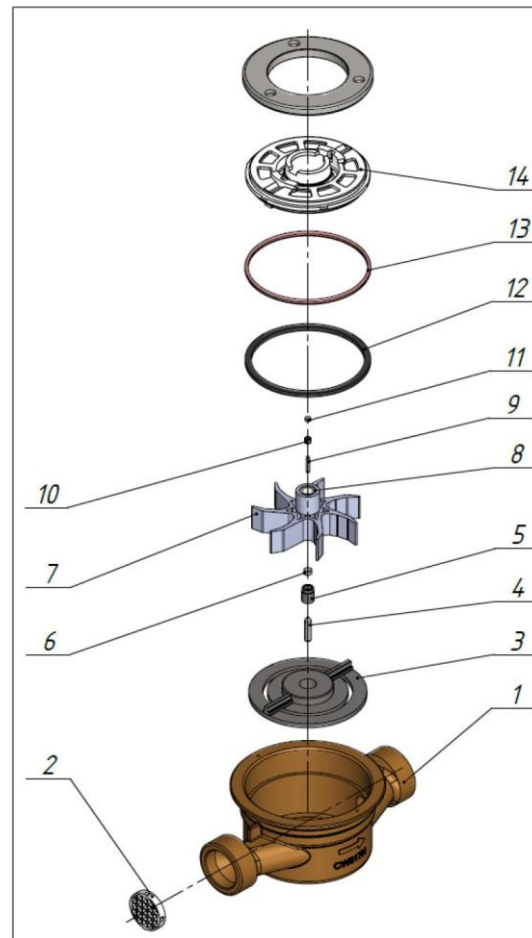


Figure 7: water meter

Schedule of materials/Calculation								
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Step 1 : Assembled Product Risk Grouping, acc. to (EU) 2024/368, table 5 36.98% metal is the largest wetted surface determining the Risk Group Metal PG B, so RG2 and module D			
Step 2 : Individual Material Risk grouping			

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm²	Surface mm²	% Wetted surface	% Wetted surface
1		Body	1	Brass	8 120		36.98%	
2		Strainer	1	Plastic 2	770		3.51%	
3		Accumulating plate	1	Plastic 3	2 820		12.84%	
4		Basic axle	1	Stainless steel 1.4404	90		0.41%	
5		Bearing sleeve	1	Plastic 4	110		0.50%	
6		Bearing stone	1	Material 1	20		0.09%	
7		Vane wheel	1	Plastic 2	5 460		24.86%	
8		Magnet	1	Ceramic	100		0.46%	
9		Axle	1	Stainless steel 1.4404	40		0.18%	
10		Bearing sleeve	1	Plastic 4	30		0.14%	
11		Bearing stone	1	Material 1	20		0.09%	
12		Slide ring	1	Plastic 3	1 080		4.92%	
13		O-Ring	1	Elastomer 1	500		2.28%	
14		Packing plate	1	Plastic 3	2 800		12.75%	
				Total :	21 960		100%	

Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
B		B+D	
	RG 2	B+D	Summation rule applied: Plastic 2 Pos.2 + Pos.7 >10%: RG2*
	RG 2	B+D	Summation rule applied: Plastic 3 Pos.3 + Pos.12 + Pos.14 >10%: RG2*
C		B+C	Summation rule applied: Stainless steel Pos.4 + Pos.9 <10%: PGC
	RG 4	B+C	Summation rule applied: Plastic 4 Pos.5 + Pos.10 <1%: RG4
	RG 4	B+C	Summation rule applied: Material 1 Pos.6 + Pos.11 <1%: RG4
	RG 2	B+D	Summation rule applied: Plastic 2 Pos.2 + Pos.7 >10%: RG2*
	RG 4	B+C	
C		B+C	Summation rule applied: Stainless steel Pos.4 + Pos.9 <10%: PGC
	RG 4	B+C	Summation rule applied: Plastic 4 Pos.5 + Pos.10 <1%: RG4
	RG 4	B+C	Summation rule applied: Material 1 Pos.6 + Pos.11 <1%: RG4
	RG 2	B+D	Summation rule applied: Plastic 3 Pos.3 + Pos.12 + Pos.14 >10%: RG2*
	RG 3	B+C	
	RG 2	B+D	Summation rule applied: Plastic 3 Pos.3 + Pos.12 + Pos.14 >10%: RG2*

* When summation rules are applied, the same summed non-metallic materials (base polymer, base ceramic, ...) are assessed equally, potentially leading to a higher risk group. If all components <10% each, the conformity assessment body decides which part(s) of same material(s) is/are tested, and for which the modules B+D are applied, in most cases the largest surface. If one or more component is > 10%, this/these component(s) is/are tested and Modules B+D are applied, but not for the smaller ones, if they can prove e.g. by pre-product certificate, that requirements and acceptance criteria for RG2 are fulfilled.

Annex 5.3 Filling valve

Schedule of materials/Calculation								
Pos.	Sub. Pos.	Part description	Qty.	Material	Surface cm ²	Surface cm ²	% Wetted surface	% Wetted surface
1		Membrane	1	Silicone A	14		6.96%	
2		Hose	1	Assembly Group	55		26.51%	
3		Fastener	1	Plastic 1	22		10.68%	
4		Housing	1	Plastic 1	54		25.90%	
5		Valve	1	Plastic 2	11		5.10%	
6		Nipple	1	Plastic 1	30		14.58%	
7		Plug	1	Silicone B	0.01		0.005%	
8		Insert	1	Plastic 1	18		8.92%	
9		O-Ring	1	Elastomer 1	2		1.00%	
10		O-Ring	1	Elastomer 1	1		0.34%	
				Total :	207		100%	

Step 1 : Assembled Product Risk Grouping >60% organic is the largest wetted surface determining the Risk Group Organic PG B, so RG2 and module D			
Step 2 : Individual Material Risk grouping			
Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
	RG 3	B+C	
	RG 1	B+D	Connection hose defined as pipe, RG1. Purchased as certified assembled product
	RG 2	B+D	Summation rule applied: Plastic 1 Pos.3 + Pos.4 + Pos.6 + Pos.8 >10%: RG2*
	RG 2	B+D	Summation rule applied: Plastic 1 Pos.3 + Pos.4 + Pos.6 + Pos.8 >10%: RG2*
	RG 3	B+C	
	RG 2	B+D	Summation rule applied: Plastic 1 Pos.3 + Pos.4 + Pos.6 + Pos.8 >10%: RG2*
	RG 4	B+C	
	RG 2	B+D	Summation rule applied: Plastic 1 Pos.3 + Pos.4 + Pos.6 + Pos.8 >10%: RG2*
	RG 3	B+C	Summation rule applied: Elastomer 1 Pos.9 + Pos.10 >1%: RG3
	RG 3	B+C	Summation rule applied: Elastomer 1 Pos.9 + Pos.10 >1%: RG3

* When summation rules are applied, the same summed non-metallic materials (base polymer, base ceramic, ...) are assessed equally, potentially leading to a higher risk group. If all components <10% each, the conformity assessment body decides which part(s) of same material(s) is/are tested, and for which the modules B+D are applied, in most cases the largest surface. If one or more component is > 10%, this/these components is/are tested and Modules B+D are applied, but not for the smaller ones, if they can prove e.g. by pre-product certificate, that requirements and acceptance criteria for RG2 are fulfilled.

Annex 5.4 Cartridge (component) - default

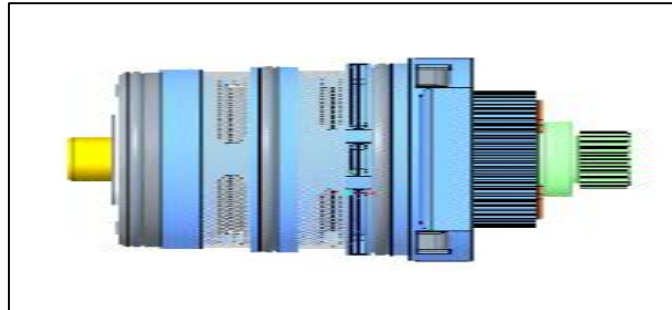


Figure 8: cartridge

Schedule of materials/Calculation									Step 1 : Assembled Product Risk Grouping, acc. to (EU) 2024/368, table 5 Used as a COMPONENT where surface ratio is HIGHER than 10% of the assembled product (default option) 52.73% organic is the largest wetted surface determining the Risk Group Organic PG B so RG 2 and Module D			
									Step 2 : Individual Material Risk grouping			
Pos.	Sub. Pos.	Part description	Qty.	Material	Surface cm ²	Surface cm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
1		Component 1	1	Plastic B	95.04		30.34%			RG 2	B+D	Summation rule applied: Plastic B Pos.1 + Pos.7 + Pos.16 >10%: RG2
2		Component 2	1	Brass 1	27.23		8.69%		C		B+C	
3		Sub assembly 1	1	Assembly Group		34,52	0.00%					Non certified component
	3.1	Part 1.1	1	Plastic C	21.74		6.94%			RG 3	B+C	
	3.2	Part 1.2	1	Brass 2	5.34		1.70%		C		B+C	Summation rule applied: Brass 2 Pos.3.2 + Pos.3.4 + Pos.6.2 + Pos.15 <10%: PGC

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface cm ²	Surface cm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
	3.3	Part 1.3	1	Stainless steel 1	6.44		2.06%		C		B+C	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2 Pos.3.3 + Pos.4 + Pos.6.4 + Pos.13 <10%: PGC
	3.4	Part 1.4	1	Brass 2	1.00		0.32%		C		B+C	Summation rule applied: Brass 2 Pos.3.2 + Pos.3.4 + Pos.6.2 + Pos.15 <10%: PGC
4		Small part 1	1	Stainless steel 1	13.15		4.20%		C		B+C	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2 Pos.3.3 + Pos.4 + Pos.6.4 + Pos.13 <10%: PGC
5		Small part 2	1	Plastic D	15.53		4.96%			RG 3	B+C	
6		Sub assembly 2	1	Assembly Group		21,88	0.00%					Non certified component
	6.1	Part 2.1	1	Organic A	6.53		2.08%			RG 3	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 >1%: RG3
	6.2	Part 2.2	1	Brass 2	5.00		1.60%		C		B+C	Summation rule applied: Brass 2 Pos.3.2 + Pos.3.4 + Pos.6.2 + Pos.15 <10%: PGC
	6.3	Part 2.3	1	Brass 3	9.00		2.87%		C		B+C	
	6.4	Part 2.4	1	Stainless steel 2	1.35		0.43%		C		B+C	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2 Pos.3.3 + Pos.4 + Pos.6.4 + Pos.13 <10%: PGC
7		Component 3	1	Plastic B	38.42		12.27%			RG 2	B+D	Summation rule applied: Plastic B Pos.1 + Pos.7 + Pos.16 >10%: RG2

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface cm ²	Surface cm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
8		Component 4	1	Organic A	4.33		1.38%			RG 3	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 >1%: RG3
9		Component 5	1	Organic A	1.94		0.62%			RG 3	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 >1%: RG3
10		Component 6	1	Organic A	7.28		2.32%			RG 3	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 >1%: RG3
11		Component 7	1	Organic A	5.72		1.83%			RG 3	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 >1%: RG3
12		Component 8	1	Organic A	4.73		1.51%			RG 3	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 >1%: RG3
13		Small part 3	2	Stainless steel 2	5.00		1.60%		C		B+C	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2 Pos.3.3 + Pos.4 + Pos.6.4 + Pos.13 <10%: PGC
14		Grease	1	Grease	4.33		1.38%			RG 3	B+C	
15		Small part 4	1	Brass 2	2.42		0.77%		C		B+C	Summation rule applied: Brass 2 Pos.3.2 + Pos.3.4 + Pos.6.2 + Pos.15 <10%: PGC
16		Small part 5	1	Plastic B	31.70		10.12%			RG 2	B+D	Summation rule applied: Plastic B Pos.1 + Pos.7 + Pos.16 >10%: RG2
				Total :	313.22		100%					

Annex 5.5 Cartridge (component) – less than 10% of an assembled product

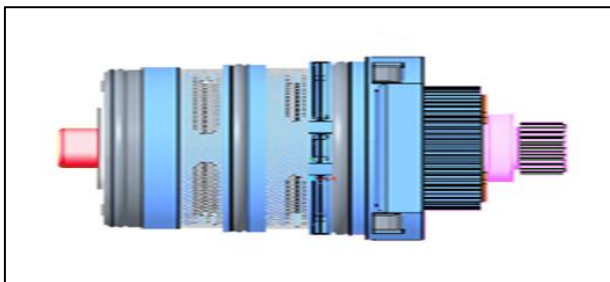


Figure 9: cartridge

Schedule of materials/Calculation								
Pos.	Sub. Pos.	Part description	Qty.	Material	Surface cm ²	Surface cm ²	% Wetted surface	% Wetted surface 10% ratio
1		Component 1	1	Plastic B	95.04		30.34%	3.03%
2		Component 2	1	Brass 1	27.23		8.69%	0.87%
3		Sub assembly 1	1	Assembly Group		34,52		
	3.1	Part 1.1	1	Plastic C	21.74		6.94%	0.69%
	3.2	Part 1.2	1	Brass 2	5.34		1.70%	0.17%

Step 1 : Assembled Product Risk Grouping, acc. to (EU) 2024/368, table 5
Used as a COMPONENT where surface ratio is SYSTEMATICALLY LOWER than 10% of the assembled product (could limit the use of the component)
52.73% organic is the largest wetted surface determining the Risk Group
Organic PG B, reduced to PG C (component less than 10%) so RG 3 and Module C

Step 2 : Individual Material Risk grouping

Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
	RG 3	B+C	Summation rule applied: Plastic B Pos.1 + Pos.7 + Pos.16 >1%: RG3
C		B+C	
			Non certified component
	RG 4	B+C	
C		B+C	Summation rule applied: Brass 2 Pos.3.2 + Pos.3.4 + Pos.6.2 + Pos.15 <10%: PGC

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface cm ²	Surface cm ²	% Wetted surface	% Wetted surface 10% ratio	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
	3.3	Part 1.3	1	Stainless steel 1	6.44		2.06%	0.21%	C		B+C	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2 Pos.3.3 + Pos.4 + Pos.6.4 + Pos.13 <10%: PGC
	3.4	Part 1.4	1	Brass 2	1.00		0.32%	0.03%	C		B+C	Summation rule applied: Brass 2 Pos.3.2 + Pos.3.4 + Pos.6.2 + Pos.15 <10%: PGC
4		Small part 1	1	Stainless steel 1	13.15		4.20%	0.42%	C		B+C	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2 Pos.3.3 + Pos.4 + Pos.6.4 + Pos.13 <10%: PGC
5		Small part 2	1	Plastic D	15.53		4.96%	0.50%		RG 4	B+C	
6		Sub assembly 2	1	Assembly Group		21,88						Non certified component
	6.1	Part 2.1	1	Organic A	6.53		2.08%	0.21%		RG 4	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 <1%: RG4
	6.2	Part 2.2	1	Brass 2	5.00		1.60%	0.16%	C		B+C	Summation rule applied: Brass 2 Pos.3.2 + Pos.3.4 + Pos.6.2 + Pos.15 <10%: PGC
	6.3	Part 2.3	1	Brass 3	9.00		2.87%	0.29%	C		B+C	
	6.4	Part 2.4	1	Stainless steel 2	1.35		0.43%	0.04%	C		B+C	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2 Pos.3.3 + Pos.4 + Pos.6.4 + Pos.13 <10%: PGC
7		Component 3	1	Plastic B	38.42		12.27%	1.23%		RG 3	B+C	Summation rule applied: Plastic B Pos.1 + Pos.7 + Pos.16 >1%: RG3

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface cm ²	Surface cm ²	% Wetted surface	% Wetted surface 10% ratio	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
8		Component 4	1	Organic A	4.33		1.38%	0.14%		RG 4	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 <1%: RG4
9		Component 5	1	Organic A	1.94		0.62%	0.06%		RG 4	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 <1%: RG4
10		Component 6	1	Organic A	7.28		2.32%	0.23%		RG 4	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 <1%: RG4
11		Component 7	1	Organic A	5.72		1.83%	0.18%		RG 4	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 <1%: RG4
12		Component 8	1	Organic A	4.73		1.51%	0.15%		RG 4	B+C	Summation rule applied: Organic A Pos.6.1 + Pos.8 + Pos.9 + Pos.10 + Pos.11 + Pos.12 <1%: RG4
13		Small part 3	2	Stainless steel 2	5.00		1.60%	0.16%	C		B+C	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2 Pos.3.3 + Pos.4 + Pos.6.4 + Pos.13 <10%: PGC
14		Grease	1	Grease	4.33		1.38%	0.14%		RG 4	B+C	
15		Small part 4	1	Brass 2	2.42		0.77%	0.08%	C		B+C	Summation rule applied: Brass 2 Pos.3.2 + Pos.3.4 + Pos.6.2 + Pos.15 <10%: PGC
16		Small part 5	1	Plastic B	31.70		10.12%	1.01%		RG 3	B+C	Summation rule applied: Plastic B Pos.1 + Pos.7 + Pos.16 >1%: RG3
				Total :	313.22		100%					

Annex 5.6 Pump

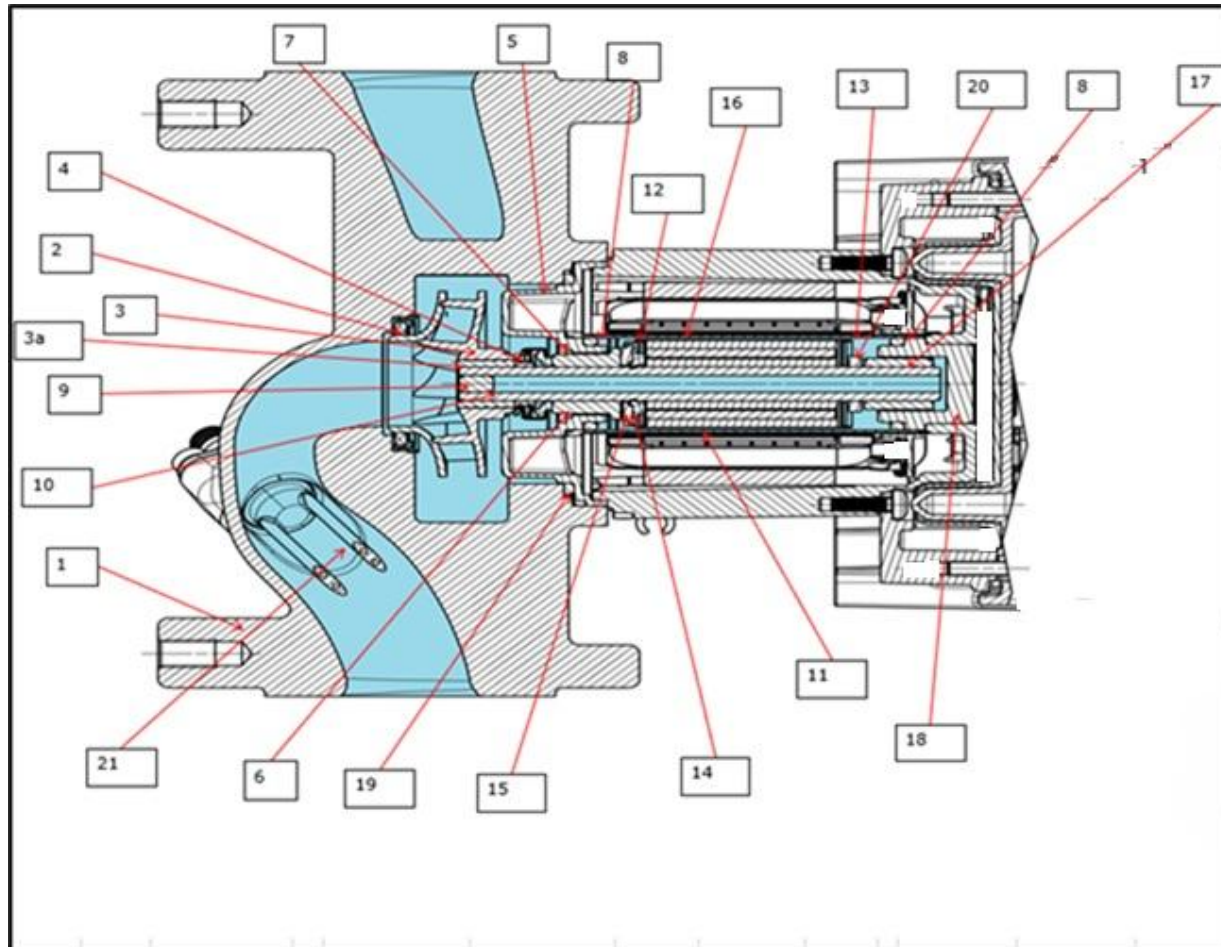


Figure 10: Pump

Schedule of materials/Calculation

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface
1		Pump housing	1	Stainless steel 1	36 099		33.61%	
2		Suction gasket assembly		Assembly Group	6 312			
	2a	Inner part	1	Stainless steel 2		2 564	2.39%	
	2b	Outer part	1	Stainless steel 2		1 924	1.79%	
	2c	Gasket ring	1	Plastic 1		1 824	1.70%	
3		Impeller	1	Plastic 1	18 860		17.56%	
4		Mechanical seal		Assembly Group	5 009		4.66%	

Step 1 : Assembled Product Risk Grouping, acc. to (EU) 2024/368, table 5

>46% metal is the largest wetted surface determining the Risk Group

Metal PG B, so RG2 and module D

Step 2 : Individual Material Risk grouping

Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
B (C)*		B+D (B+C)*	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2+3+4 >10%: PGB (domestic/buildings installations)*
			Non certified component Otherwise Complete assembly <10% wetted surface. Assembled product modules B+C.
B (C)*		B+D (B+C)*	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2+3+4 >10%: PGB (domestic/buildings installations)*
B (C)*		B+D (B+C)*	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2+3+4 >10%: PGB (domestic/buildings installations)*
	RG 2	B+D	Summation rule applies: Plastic 1 Pos.2c + Pos.3 + Pos.16 + Pos.21a+b >10%: RG2
	RG 2	B+D	Summation rule applies: Plastic 1 Pos.2c + Pos.3 + Pos.16 + Pos.21a+b >10%: RG2
	RG 3	B+C	Purchased as certified assembled component RG 3

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface
	4a	Seal ring	1	Ceramic		1 012		
	4b	Elastomer part	1	Elastomer 1		1 257		
	4c	Locking ring	1	Stainless steel 2		530		
	4d	Ring	1	Stainless steel 2		309		
	4e	Collar	1	Stainless steel 2		1 258		
	4f	Spring	1	Stainless steel 2		643		
5		Part A	1	Cu-alloy 1	5 910		5.50%	
6		Part B	1	Graphite 1	1 157		1.08%	
7		Part C	1	Stainless steel 3	3 000		2.79%	
8		O-Ring	1	Elastomer 1	512		0.48%	
9		Part D	1	Stainless steel 3	2 000		1.86%	
10		Shaft	1	Stainless steel 4	3 314		3.09%	
10a		Coating	1	Coating 1	2 433		2.27%	

Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
C		B+C	Summation rule applied: Cu alloy 1 Pos.5 + Pos.18 + Pos.30 <10%: PGC
	RG 3	B+C	Summation rule applied: Graphite 1 Pos.6 + Pos.17 >1%: RG3
B (C)*		B+D (B+C)*	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2+3+4 >10%: PGB (domestic/buildings installations)*
	RG 3	B+C	Summation rule applies: Elastomer 1 Pos.8 + Pos.14 + Pos.19 + Pos.21c >1%: RG3
B (C)*		B+D (B+C)*	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2+3+4 >10%: PGB (domestic/buildings installations)*
B (C)*		B+D (B+C)*	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2+3+4 >10%: PGB (domestic/buildings installations)*
	RG 3	B+C	Summation rule applies: Coating 1 Pos.10a + Pos.20a >1%: RG3

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
11		Part D	1	Stainless steel 2	3 896		3.63%		B (C)*		B+D (B+C)*	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2+3+4 >10%: PGB (domestic/buildings installations)*
12		Part E	1	Stainless steel 2	918		0.85%		B (C)*		B+D (B+C)*	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2+3+4 >10%: PGB (domestic/buildings installations)*
13		Part F	1	Stainless steel 2	908		0.85%		B (C)*		B+D (B+C)*	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2+3+4 >10%: PGB (domestic/buildings installations)*
14		Part G	1	Elastomer 1	2 066		1.92%			RG 3	B+C	Summation rule applies: Elastomer 1 Pos.8 + Pos.14 + Pos.19 + Pos.21c >1%: RG3
15		Part H	1	Ceramic 3	1 290		1.20%			RG 3	B+C	
16		Part I	1	Plastic 1	6 330		5.89%			RG 2	B+D	Summation rule applies: Plastic 1 Pos.2c + Pos.3 + Pos.16 + Pos.21a+b >10%: RG2
17		Part J	1	Graphite 1	1 240		1.15%			RG 3	B+C	Summation rule applied: Graphite 1 Pos.6 + Pos.17 >1%: RG3
18		Part K	1	Cu-alloy 1	338		0.31%		C		B+C	Summation rule applied: Cu alloy 1 Pos.5 + Pos.18 + Pos.30 <10%: PGC
19		O-Ring	1	Elastomer 1	672		0.63%			RG 3	B+C	Summation rule applies: Elastomer 1 Pos.8 + Pos.14 + Pos.19 + Pos.21c >1%: RG3

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
20		Part L	1	Stainless steel 4	289		0.27%		B (C)*		B+D (B+C)*	All Stainless steels in one entry of EUPL Summation rules applied: Stainless steel 1+2+3+4 >10%: PGB (domestic/buildings installations)*
20a		Part M	1	Coating 1	289		0.27%			RG 3	B+C	Summation rule applies: Coating 1 Pos.10a + Pos.20a >1%: RG3
21		Flow sensor C			4 330		4.03%					Non certified component Otherwise Complete assembly : < 10% wetted surface, Assembled product modules B+C
	21a+b	Housing	1	Plastic 1		4 202		3.91%		RG 2	B+D	Summation rule applies: Plastic 1 Pos.2c + Pos.3 + Pos.16 + Pos.21a+b >10%: RG2
	21c	O-Ring	1	Elastomer 1		128		0.12%		RG 3	B+C	Summation rule applies: Elastomer 1 Pos.8 + Pos.14 + Pos.19 + Pos.21c >1%: RG3
3a		small part		Cu-alloy 1	241		0.22%		C		B+C	Summation rule applied: Cu alloy 1 Pos.5 + Pos.18 + Pos.30 <10%: PGC
Total :					107 412		100%					

* The pump in this example is used in domestic applications, so leading to PG B for some metal parts.

For pumps in water mains, other Product Groups may apply (PG C).

The summation rules are applied. If all components <10% each, the conformity assessment body decides which part(s) of same material(s) is/are tested, and for which the modules B+D are applied, in most cases the largest surface. If one or more components > 10%, this/these components is/are tested and Modules B+D are applied, but not for the smaller ones, if they can prove e.g. by pre-product certificate, that requirements and acceptance criteria for RG2 are fulfilled.

Annex 5.7 Submersible pump

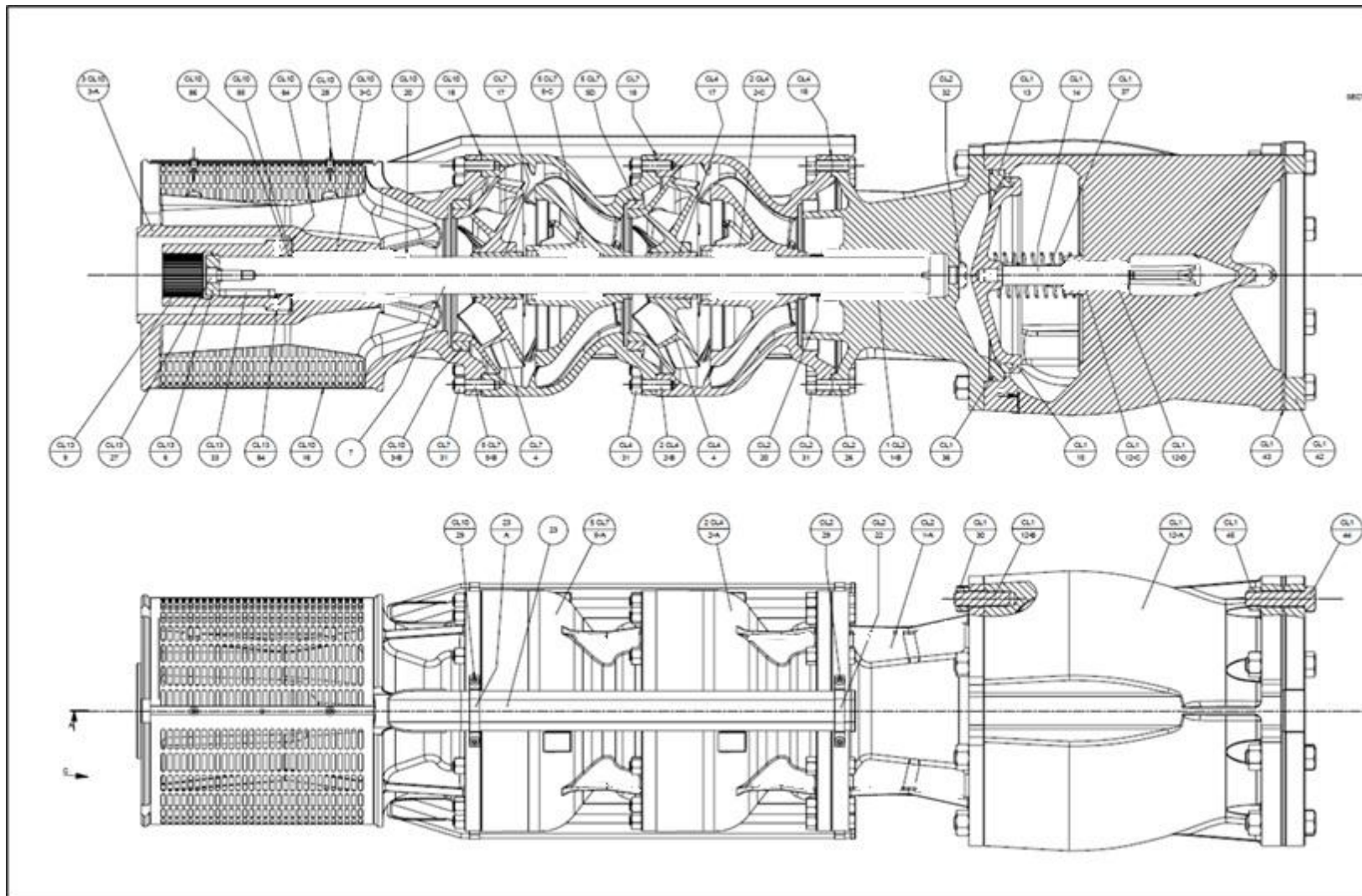


Figure 11: Submersible pump

Schedule of materials/Calculation								
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Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface
1.12c		Pump shaft + Bearing	1	Elastomer 1			0.14%	
1.12d		Pump shaft + Bearing	1	Elastomer 1			0.19%	
1.15		Complete valve	1	Elastomer 1			0.20%	
1.36		O-Ring seal	1	Elastomer 1			0.22%	
1.43		Gasket for flange	1	Elastomer 2			0.13%	
10.3c		Pump shaft + Bearing	1	Elastomer 1			0.75%	
10.18		Gasket	1	Elastomer 2			0.01%	

Step 1 : Assembled Product Risk Grouping, acc. to (EU) 2024/368, table 5 > 97% metal is the largest wetted surface determining the Risk Group Metallic PG B, so RG2 and module D			
Step 2 : Individual Material Risk grouping			

Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
	RG 3	B+C	Summation rule applies: Elastomer 1 Pos.1.12c + Pos.1.12d + Pos.1.15 + Pos.1.36 + Pos.3c + Pos.10.20 + Pos.10.86 >1%: RG3
	RG3	B+C	Summation rule applies: Elastomer 1 Pos.1.12c + Pos.1.12d + Pos.1.15 + Pos.1.36 + Pos.3c + Pos.10.20 + Pos.10.86 >1%: RG3
	RG 3	B+C	Summation rule applies: Elastomer 1 Pos.1.12c + Pos.1.12d + Pos.1.15 + Pos.1.36 + Pos.3c + Pos.10.20 + Pos.10.86 >1%: RG3
	RG 3	B+C	Summation rule applies: Elastomer 1 Pos.1.12c + Pos.1.12d + Pos.1.15 + Pos.1.36 + Pos.3c + Pos.10.20 + Pos.10.86 >1%: RG3
	RG 4	B+C	Summation rule applies: Elastomer 2 Pos.1.43 + Pos.10.18 <1%: RG4
	RG 3	B+C	Summation rule applies: Elastomer 1 Pos.1.12c + Pos.1.12d + Pos.1.15 + Pos.1.36 + Pos.3c + Pos.10.20 + Pos.10.86 >1%: RG3
	RG 4	B+C	Summation rule applies: Elastomer 2 Pos.1.43 + Pos.10.18 <1%: RG4

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
10.2		Sand guard	1	Elastomer 1			0.42%			RG 3	B+C	Summation rule applies: Elastomer 1 Pos.1.12c + Pos.1.12d + Pos.1.15 + Pos.1.36 + Pos.3c + Pos.10.20 + Pos.10.86 >1%: RG3
10.86		O-Ring seal	1	Elastomer 1			0.02%			RG 3	B+C	Summation rule applies: Elastomer 1 Pos.1.12c + Pos.1.12d + Pos.1.15 + Pos.1.36 + Pos.3c + Pos.10.20 + Pos.10.86 >1%: RG3
		Metallic parts	Rem.	Stainless steel			Rem.		B		B+D	All Stainless steels in one entry of EUPL >10%: PGB
				Total :	0		100%					

Annex 5.8 Water heater 50L

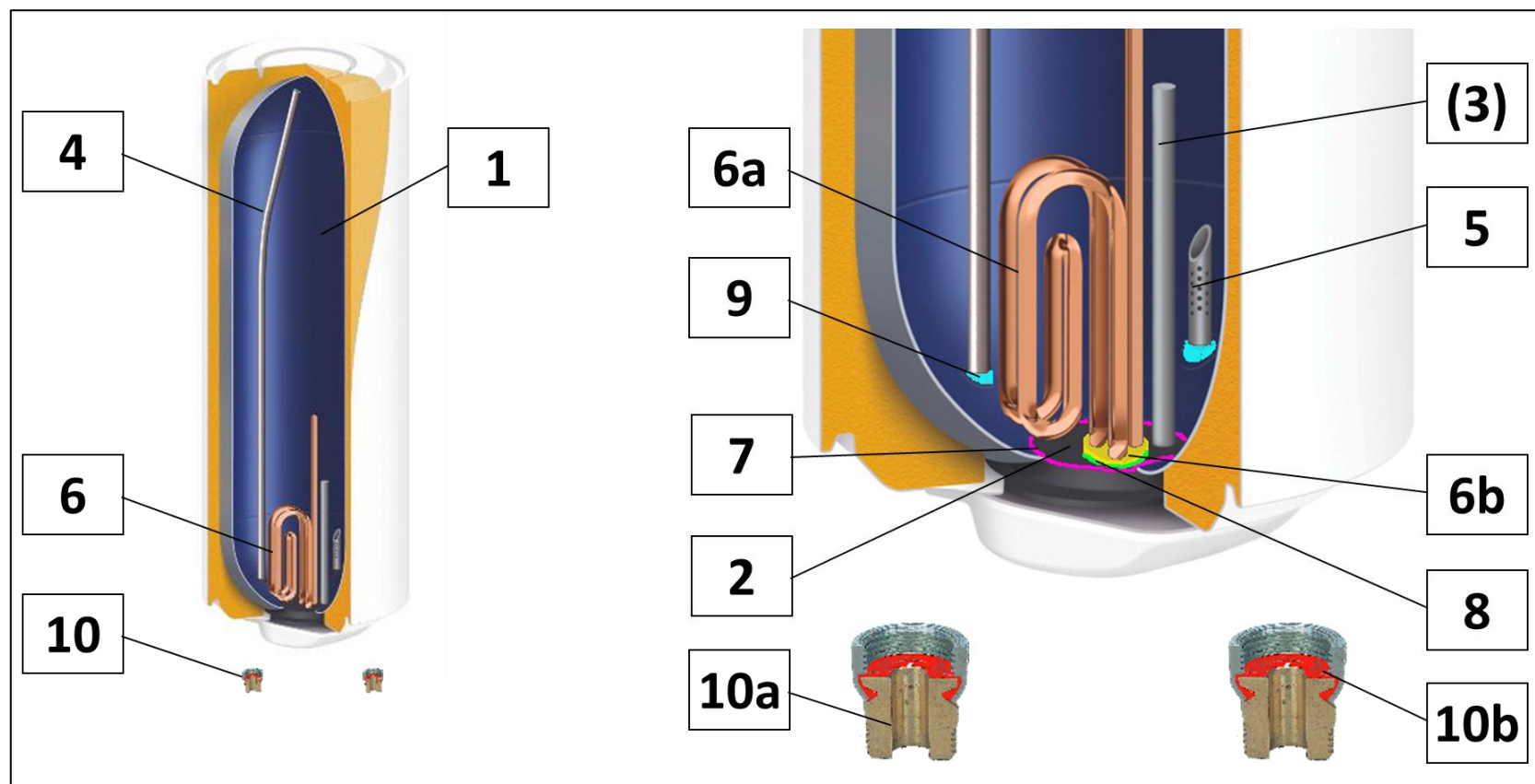


Figure 12: water heater 50L

Schedule of materials/Calculation								
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Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface
1		Tank	1	Enamel A	650 000		85.67%	
2		Flange	1	Enamel A	2 900		0.38%	
3		Sacrificial anode	1	Magnesium	12 500		1.65%	
4		Outlet tube	1	Stainless steel 1	38 800		5.11%	
5		Inlet tube	1	Stainless steel 1	8 300		1.09%	
6		Heating element	1	Assembly		29 300		
	6a	Heating element - Copper part	1	Copper	26 500	26 500	3.49%	
	6b	Heating element - brass part	1	Brass A	2 800	2 800	0.37%	
7		Flange gasket	1	Elastomer A	8 300		1.09%	
8		Heating element Gasket	1	Elastomer A	350		0.05%	
9		Plastic sleeves for tube	2	Plastic 2	7 000		0.92%	
10		Dielectric union	1	Assembly		1 250		
	10a	Dielectric union - metallic part	1	Brass B	1 200	1 200	0.16%	
	10b	Dielectric union - plastic part	1	Plastic 1	50	50	0.01%	

Step 1 : Assembled Product Risk Grouping, acc. to (EU) 2024/368, table 5

87.5% enamel is the largest wetted surface determining the Risk Group
Enamel PG E2 (50L), so RG2 and module D

Step 2 : Individual Material Risk grouping

Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
	RG 2	B+D	Summation rules applied: Enamel A Pos.1 + Pos.2 >10%: RG2
	RG 2	B+D	Summation rules applied: Enamel A Pos.1 + Pos.2 >10%: RG2
			Article 12, Sacrificial anode
C		B+C	Summation rules applied: Stainless steel 1 Pos.4 + Pos.5 <10%: PGC
C		B+C	Summation rules applied: Stainless steel 1 Pos.4 + Pos.5 <10%: PGC
			Non certified component
C		B+C	
C		B+C	
	RG 3	B+C	Summation rules applied: Elastomer A Pos.7 + Pos.8 >1%: RG3
	RG 3	B+C	Summation rules applied: Elastomer A Pos.7 + Pos.8 >1%: RG3
	RG 4	B+C	
			Non certified component
C		B+C	
	RG 4	B+C	

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
				Total :	758 700		100%					

Annex 5.9 Boiler

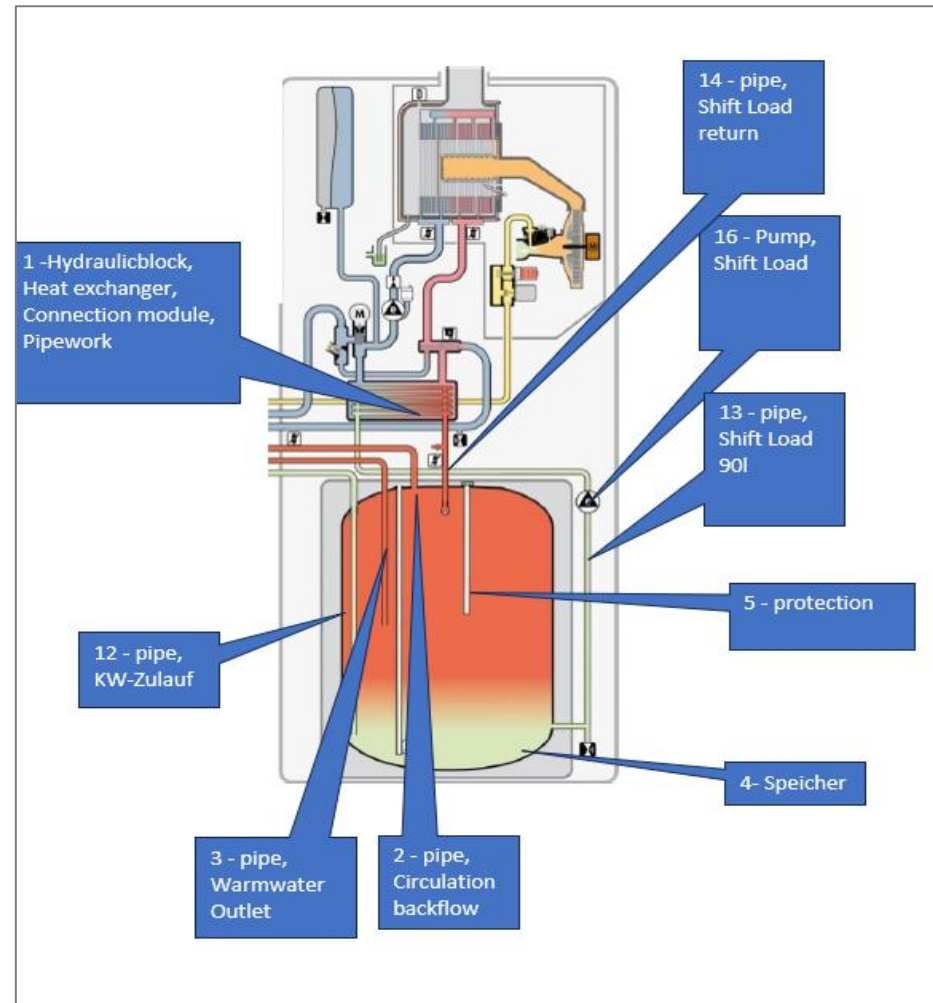


Figure 13: Boiler

Schedule of materials/Calculation

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface
1		Hydraulic block	1			191 572	0.00%	11.36%
	1a	Sealing	1	Elastomer 3	53		0.00%	
	1b	Sealing ring	1	Elastomer 1	1 443		0.09%	
	1c	Plastic part	1	Plastic 1	2 834		0.17%	
	1d	Copper pipe	1	Metal 1	21 915		1.30%	
	1e	Heat exchanger 15 plates	15	Metal 5	144 000		8.56%	
	1f	Seal C type	2	Elastomer 1	1 250		0.07%	
	1g	Copper pipe DHW hot	1	Metal 1	14 220		0.85%	

Step 1 : Assembled Product Risk Grouping, acc. to (EU) 2024/368, table 5

63.47% enamel is the largest wetted surface determining the Risk Group
Enamel PG E2 (90L), so RG2 and module D

Step 2 : Individual Material Risk grouping

Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
			Non certified component
	RG 4	B+C	Summation rules applied: Elastomer 3 Pos.1a + Pos.8 <1%: RG4
	RG 4	B+C	Summation rules applied: Elastomer 1 Pos.1b + Pos.1f + Pos.1i + Pos.1k + Pos.18 + Pos.19 <1%: RG4
	RG 4	B+C	
C		B+C	Summation rules applied: Metal 1 Pos.1d + Pos.1g + Pos.2 + Pos.3 <10%: PGC
C		B+C	Heat exchanger is not the main component in the final assembled product. This is the reason to include the surface for the complete surface calculation. In case this would be the main components, the surface should be excluded in the summation and because of this, the plastic material would be categorized from RG3 to RG2.
	RG 4	B+C	Summation rules applied: Elastomer 1 Pos.1b + Pos.1f + Pos.1i + Pos.1k + Pos.18 + Pos.19 <1%: RG4
C		B+C	Summation rules applied: Metal 1 Pos.1d + Pos.1g + Pos.2 + Pos.3 <10%: PGC

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
	1h	Connector shift load	1	Metal 3	2 607		0.16%		C		B+C	Summation rules applied: Metal 3 Pos.1h + Pos.9 + Pos.10 <10%: PGC
	1i	Sealing ring	1	Elastomer 1	53		0.00%			RG 4	B+C	Summation rules applied: Elastomer 1 Pos.1b + Pos.1f + Pos.1i + Pos.1k + Pos.18 + Pos.19 <1%: RG4
	1j	Housing	1	Metal 7	2 222		0.13%		C		B+C	
	1k	O'ring	1	Elastomer 1	193		0.01%			RG 4	B+C	Summation rules applied: Elastomer 1 Pos.1b + Pos.1f + Pos.1i + Pos.1k + Pos.18 + Pos.19 <1%: RG4
	1l	Pusher	1	Metal 6	612		0.04%		C		B+C	Summation rules applied: Metal 6 Pos.1l + Pos.1m <10%: PGC
	1m	Spring	1	Metal 6	170		0.01%		C		B+C	Summation rules applied: Metal 6 Pos.1l + Pos.1m <10%: PGC
2		Pipe	1	Metal 1	43 432		2.58%		C		B+C	Summation rules applied: Metal 1 Pos.1d + Pos.1g + Pos.2 + Pos.3 <10%: PGC
3		Pipe	1	Metal 1	52 411		3.12%		C		B+C	Summation rules applied: Metal 1 Pos.1d + Pos.1g + Pos.2 + Pos.3 <10%: PGC
4		Storage container 90L	1	Enamel	1 070 000		63.63%			RG 2	B+D	
5		Sacrificial anode	1	Magnesium	26 641		1.58%					Article 12, Sacrificial anode
6		Pipe - shift load departure	1	Metal 2	45 239		2.69%		C		B+C	Summation rules applied: Metal 2 Pos.6 + Pos.7 + Pos.11 <10%: PGC
7		Pipe - shift load storage	1	Metal 2	12 359		0.73%		C		B+C	Summation rules applied: Metal 2 Pos.6 + Pos.7 + Pos.11 <10%: PGC
8		Sealing	8	Elastomer 3	2 728		0.16%			RG 4	B+C	Summation rules applied: Elastomer 3 Pos.1a + Pos.8 <1%: RG4
9		Cap	1	Metal 3	984		0.06%		C		B+C	Summation rules applied: Metal 3 Pos.1h + Pos.9 + Pos.10 <10%: PGC
10		Nipple - connection storage	3	Metal 3	3 492		0.21%		C		B+C	Summation rules applied: Metal 3 Pos.1h + Pos.9 + Pos.10 <10%: PGC
11		Adapter	2	Metal 2	2 898		0.17%		C		B+C	Summation rules applied: Metal 2 Pos.6 + Pos.7 + Pos.11 <10%: PGC

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
12		Pipe - KW-inlet 90L	1	Plastic 2	58 533		3.48%			RG 3	B+C	Summation rules applied: Plastic 2 Pos.12 + Pos.13 + Pos.14 <10%: RG3 "Pipe" is a part in assembled product
13		Pipe - shift load 90L	1	Plastic 2	71 579		4.26%			RG 3	B+C	Summation rules applied: Plastic 2 Pos.12 + Pos.13 + Pos.14 <10%: RG3 "Pipe" is a part in assembled product
14		Pipe - shift load return	1	Plastic 2	7 511		0.45%			RG 3	B+C	Summation rules applied: Plastic 2 Pos.12 + Pos.13 + Pos.14 <10%: RG3 "Pipe" is a part in assembled product
15		Pipe	2	Plastic 3	20 806		1.24%			RG 3	B+C	"Pipe" is a part in assembled product
16		Pump total	1	Assembly grou		31 966	0.00%	1.90%		RG 3	B+C	Purchased as certified assembled product RG 3
	16a	Pump shift load	1	Plastic 4	14 604		0.87%					
	16b		1	Elastomer 2	3 375		0.20%					
	16c		1	Plastic 5	6 478		0.39%					
	16d		1	Carbon	103		0.01%					
	16e		1	Ceramic	62		0.00%					
	16f		1	Metal 6	7 344		0.44%					
17		Drain cock	1	Metal 4	773		0.05%		C		B+C	
18		Drain cock O-ring	1	Elastomer 1	156		0.01%			RG 4	B+C	Summation rules applied: Elastomer 1 Pos.1b + Pos.1f + Pos.1i + Pos.1k + Pos.18 + Pos.19 <1%: RG4
19		O-Ring	2	Elastomer 1	525		0.03%			RG 4	B+C	Summation rules applied: Elastomer 1 Pos.1b + Pos.1f + Pos.1i + Pos.1k + Pos.18 + Pos.19 <1%: RG4
20		Piping - shift load top module	1	Metal 2	14 416		0.86%		C		B+C	Summation rules applied: Metal 2 Pos.20 + Pos.21 + Pos.22 <10%: RG3 "Pipe" is a part in assembled product
21		Piping - shift load		Metal 2	15 536		0.92%		C		B+C	Summation rules applied: Metal 2 Pos.20 + Pos.21 + Pos.22 <10%: RG3 "Pipe" is a part in assembled product

Pos.	Sub. Pos.	Part description	Qty.	Material	Surface mm ²	Surface mm ²	% Wetted surface	% Wetted surface	Product Group metals 2024/365 Annex II Table 2	Risk Group 2024/368 Annex I, III or IV, Table 1	Module assessment [B+C or B+D] 2024/370 Article 2	Comments
22		Piping - shift load		Metal 2	7 986		0.47%		C		B+C	Summation rules applied: Metal 2 Pos.20 + Pos.21 + Pos.22 <10%: RG3 "Pipe" is a part in assembled product
				Total :	1 681 543		100%					

ANNEX 6 Checklist for assembled product manufacturers which can be provided to suppliers

Q1: What is the total wetted surface of the component?

Q2: Is the part already tested/certified?

Q3: If yes, according to which RG?

Q4: If no, do you plan to test the part according to EU-DWD?

Q5: If Q4 is also no, would you support us regarding the recipe check-up and sampling?

For metallic materials Q1 is sufficient.

ANNEX 7 Examples of different certificates

Certificate issued for	EU marking	Notes
Product	Yes	- Covers a single product (can be an assembled product) - Certificate has to clearly specify the covered product and all production site(s) - Certificate has to specify the assessed product group and the applied conformity assessment procedure (modules B & D or module B)
Product type series	Yes	- Covers a group of (assembled) products - Certificate has to list the covered products and all production site(s) - Certificate has to specify the assessed product group and the applied conformity assessment procedure (modules B & D or module B)
Component(s)	Yes ¹	- Covers a group of components - Certificate has to list the covered components and all production site(s) - Certificate has to specify the assessed product group and the applied conformity assessment procedure (modules B & D or module B)
Pre-product	No	- Issued for pre-products - Certificate is issued for a pre-assessment and is based on the testing of test pieces made of the final material - Certificate has to specify the assessed product group - Certificate has to make a reference to the production conditions to be applied
Intermediate product	No	- Issued for intermediate products (e.g. coatings, adhesives, polymers to be cross-linked, ready-to-used cementitious product (Type 2)) - Certificate is issued for a pre-assessment and is based on the testing of test pieces made of the final material - Certificate has to specify the assessed product group - Certificate has to make a reference to the production conditions to be applied. - For the assessment of final organic material classified in RG2 this certificate covers only the formulation review and EMG. - This certificate is important for site applied products
Constituent product	No	- Issued for constituent products used for manufacturing of cementitious materials - Certificate is issued for a pre-assessment and is based on the testing of the constituent product in a standardized cementitious matrix as a test piece of a final material - Certificate has to specify the assessed product group and its maximum authorized concentration in the formulation (concentration which has been tested)
Formulation	No	Certificate has to specify clearly that the certificate only covers the formulation review and that no further testing was performed.

		• Certificate has to include the information that the conformity assessment body will provide the identity or the number of relevant substances to be analysed in the migration waters to other conformity assessment bodies. • Certificate only becomes effective when identity of relevant substances can be disclosed to other conformity assessment bodies.
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ANNEX 8 Practical issues, which might appear

FAQ that will be completed in a later stage

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