



Certification Scheme

flustix PLASTICFREE - Product Content Microplastic-Free

Edition: September 2025

The certification scheme enables certain products and materials intended for further processing that do not contain microplastics to be certified with the independent certification mark "flustix PLASTICFREE - Product Content Microplastic-Free" if they meet the criteria for the "flustix PLASTICFREE - Product Content Microplastic-Free" label.

To clearly declare the certified goods in the B2B sector, to end consumers and/or other affected parties, a specific category labeling is carried out:

- Product Content Microplastic-Free

In collaboration with approved and recognized testing partners, flustix GmbH and its accredited partners provide the economy and the consumer with a reliable guidance system for plastic-reduced purchases, supporting environmental and resource protection and enabling companies to transparently highlight their careful handling of the valuable material plastic.

The "flustix PLASTICFREE - Product Content Microplastic-Free" certification mark communicates to consumers (B2C) and economic operators (B2B) that an impartial expert body has intensively analyzed the testing standards and thoroughly evaluated them before awarding the certification mark.

The "flustix PLASTICFREE " mark is the first European certification mark for microplastic-free products registered in the EU as a warranty mark, serving as both a test seal and a trademark-protected word and design mark.

In combination with the general terms and conditions of the issuing accredited certification partner, this certification scheme provides manufacturers and distributors of microplastic-free products with the basis to label their items with the "flustix PLASTICFREE - Product Content Microplastic-Free" certification mark, confirming that all requirements of the certification scheme have been independently reviewed and met by multiple recognized instances.

Microplastic-free materials, semi-finished products, and products receive the "flustix PLASTICFREE - Product Content Microplastic-Free" certification mark if they meet the conditions aimed in Section 4 and have undergone and passed the process described in the certification scheme.

A current list of certificate holders can be viewed on the website www.flustix/certified.com.

Validity Start

The validity of this certification scheme starts from September 2025.

Amendments

The following amendments have been introduced compared to the certification scheme "flustix PLASTICFREE" (2025-02):

- Extension of the testing basis by DIN EN ISO 24187:2024-04 in section 5.4.2
- Reduction of the analytical particle size detection limit for microplastics to 1.0 µm in sections 3.5, 4 and 5.4.2
- Adjustment of the polymers excluded from the definition of microplastics in section 3.5
- Extension of the test methods for determining the biodegradability of polymers in section 3.5
- Extension of the application documents to be submitted for certification in section 6.1
- Editorial revisions

Previous Editions:

Terms and Quality Definitions: "Plastic-free / Non-plastic Consumer Goods" (2017-09)

Definition: "Plastic-free / Non-plastic Consumer Goods and/or Plastic-free / Non-plastic Sales Packaging of Consumer Goods" (2019-07)

Certification Scheme "flustix PLASTICFREE" (2020-06)

Certification Scheme "flustix PLASTICFREE" (2020-11)

Certification Scheme "flustix PLASTICFREE" (2022-02)

Certification Scheme "flustix PLASTICFREE" (2024-02)

Certification Scheme "flustix PLASTICFREE" (2024-09)

Certification Scheme "flustix PLASTICFREE" (2025-02)

CONTENTS

1	Scope	6
2	Test and Certification Specifications.....	6
3	Definitions.....	8
3.1	Consumer goods	8
3.1.1	Products	8
3.1.2	Packaging	8
3.2	Semi-finished products	9
3.3	Polymer	9
3.4	Plastics.....	9
3.5	Polymer Microparticles / Microplastics	10
3.6	Primary Microplastics	11
3.7	Unavoidable Residues	11
4	Requirements for PRODUCT CONTENT MICROPLASTIC-FREE	12
5	Laboratory Testing	12
5.1	General Information	12
5.2	Types of testing	12
5.2.1	Initial Test (Type Test)	12
5.2.2	Monitoring Test (Control Test).....	12
5.2.3	Supplementary Test.....	12
5.2.4	Special Test.....	12
5.3	Sampling Procedure	13
5.4	Test Procedure	13
5.4.1	General Information	13
5.4.2	Testing of Products and Semi-finished products with Microplastic-free Product Content	13
5.5	Test Reporting	14
6	Certification.....	14
6.1	Application for Certification.....	15
6.2	Classification of Types and Subtypes	15
6.2.1	Types	15
6.2.2	Subtypes.....	15
6.3	Sub-Certificates.....	16
6.4	Conformity Assessment.....	16
6.5	Issue of the Certificate and right to use the Certification Mark.....	16
6.6	Publications	17
6.7	Validity of the Certificate.....	17
6.8	Renewal of the Certificate	17
6.9	Expiry of the Certificate	17

6.10	Modification/Amendment	18
6.10.1	Modification/Amendment of a Product or Semi-finished product	18
6.10.2	Evaluation of Test Specifications	18
6.11	Rectification of Defects in the Product or Semi-finished product.....	18
7	Self-Monitoring by the Manufacturer	19
8	External Monitoring by the Certification Partner	19

1 Scope

The certification scheme applies to microplastic-free products as well as semi-finished products and includes, in combination with the testing criteria listed below, all requirements for awarding the certification mark "flustix PLASTICFREE - Product Content Microplastic-Free".

Through independent certification and regular monitoring, the certification offers consumers reliable guidance for conscious sustainable product purchases (B2C) and supports innovative economic actors in communicating the sustainable properties of their semi-finished products and products in professional trade (B2B).

This certification scheme defines requirements based on the certification mark for products or semi-finished products as well as their testing, monitoring, and certification.

2 Test and Certification Specifications

The testing and certification are based on the documents listed below. Only the cited version applies to dated references. For undated references, the latest version of the referenced document, including all changes, always applies.

DIN EN ISO 472	Plastics - Vocabulary (ISO/TC 61/SC1)
ISO/TR 21960:2020	Plastics – Environmental aspects – State of knowledge and Methodologies
DIN EN ISO 24551:2020-08	Ergonomics - Accessible design - Auditory guidance for consumer products
DIN EN ISO 24187:2024-04	Principles for the analysis of microplastics present in the environment
ISO/DIS 16094-2	Wasserbeschaffenheit – Analyse von Mikroplastik in Wasser – Teil 2: Verfahren mittels Vibrationsspektroskopie für Wässer mit niedrigem Gehalt an suspendierten Feststoffen, einschließlich Trinkwasser
ISO/DIS 16094-3	Wasserbeschaffenheit — Analyse von Mikroplastik in Wasser — Teil 3: Thermo-analytische Verfahren für Wässer mit niedrigem Gehalt an suspendierten Feststoffen, einschließlich Trinkwasser
DIN/TS 10068:2022-09	Food - Determination of microplastics - Analytical methods
DIN EN ISO 14025:2011-10	Environmental labels and declarations - Type III environmental declarations - Principles and procedures
DIN ISO 13022:2014-06	Medical products containing viable human cells - Application of risk management and requirements for processing practices.
DIN EN ISO 472/A1:2019-03	Plastics - Vocabulary - Amendment 1: Additional entries (ISO 472:2013/Amd.1:2018); Trilingual version EN ISO 472:2013/A1:2018

DIN EN 61000-6-7; VDE 0839-6-7:2015-12	Electromagnetic Compatibility (EMC) - Part 6-7: Generic Standards - Immunity Requirements for Equipment Intended to Perform Functions in a Safety-Related System (Functional Safety) in Industrial Locations
DIN EN 13130-1	Materials and articles in contact with foodstuffs - Substances subject to limitation - Part 1: Guide to the test procedures for the specific migration of substances from plastics into foods and food simulants and the determination of substances in plastics and the selection of conditions of exposure to food simulants
Directive 94/62/EC	Directive of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste
Regulation (EU) 2025/40	Regulation (EU) 2025/40 of the European Parliament and of the Council of 19 December 2024 on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC
Regulation (EU) No 10/2011	Commission Regulation on plastic materials and articles intended to come into contact with food
ECHA	ANNEX XV RESTRICTION REPORT, PROPOSAL FOR A RESTRICTION, VERSION NUMBER: 1, DATE: 11 January 2019, European Chemicals Agency (ECHA), Annankatu 18, PO BOX
Regulation (EC) No 1907/2006	Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
Regulation (EU) 2023/2055	Commission Regulation (EU) 2023/2055 of 25 September 2023 amending Annex XVII to Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards synthetic polymer micro particles
EU Ecolabel	EU Ecolabel User Manual for Detergents, Version 1.5, February 2024, Section 2.2.2
DID List Part A	European Commission. Detergents Ingredient Database (DID) List – Part A (2023). Brussels: European Commission, 2023. Available at: https://circabc.europa.eu/ui/group/0e3024d9-38be-415b-b141-c05d5d31dd92/library/057790be-097a-4f45-b0e3-21b81580ec60/details (accessed 24/09/2025)
Regulation (EC) No 1223/2009	Regulation (EC) No. 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products
Regulation (EC) No 648/2004	Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents

EWKVerbotsV

Regulation on the prohibition of the placing on the market of certain single-use plastic products and products made of oxo-degradable plastic (Single-Use Plastic Prohibition Regulation)

- This Certification scheme
- "Positive Analysis Result" form
- General Terms and Conditions of the Certification Partner
- The Testing, Registration, and Certification Regulations of the Certification Partner
- The corresponding Fee Schedule of the Certification Partner

Any prevailing obligations to comply with the laws and regulations applicable to the respective products are not affected by this certification scheme, and compliance with these lies within the responsibility of the distributor.

3 Definitions

The definitions apply to microplastic-free products as well as semi-finished products and raw materials of all kinds intended for further processing. In particular, they concern goods in the areas of personal care, cosmetics, laundry, cleaning, and detergents, as well as household, garden, and agricultural products (including compost and fertilizers or soil conditioners).

The term "microplastic-free" as used in these definitions does not imply a qualitative assessment of products or semi-finished products and raw materials of any kind intended for further processing.

When using these definitions, care must be taken to ensure that the informed consumer and business partner, within the meaning of fair competition law, are not misled.

3.1 Consumer goods

Consumer goods are items that are manufactured and traded for private use or consumption by consumers, intended for purchase and personal, rather than professional, use by an individual.¹ A consumer good consists of the respective product and its packaging. If a consumer good is offered and/or marketed without packaging, this definition applies only to the product itself.

3.1.1 Products

Goods offered for sale on the market by the manufacturer or his agent. Without packaging.²

3.1.2 Packaging

Packaging means an item, irrespective of the materials from which it is made, that is intended to be used by an economic operator for the containment, protection, handling, delivery or presentation of products to another economic operator or to an end user, and that can be differentiated by packaging format based on its function, material and design, including:

- a) an item that is necessary to contain, support or preserve a product throughout its lifetime, without being an integral part of the product, and which is intended to be used, consumed or disposed of together with the product;
- b) a component of, and ancillary element to, an item referred to in point (a) that is integrated into the item;

¹ Cf. DIN EN ISO 24551:2020-08

² Cf. DIN EN 61000-6-7; VDE 0839-6-7:2015-12

- c) an ancillary element to an item referred to in point (a) that is hung directly on, or attached to, the product and that performs a packaging function, without being an integral part of the product, and which is intended to be used, consumed or disposed of together with the product;
- d) an item that is designed and intended to be filled at the point of sale in order to dispense the product, which is also referred to as 'service packaging';
- e) a disposable item that is sold and filled or designed and intended to be filled at the point of sale and which performs a packaging function;
- f) a permeable tea, coffee or other beverage bag, or soft after-use system single-serve unit that contains tea, coffee or another beverage, and which is intended to be used and disposed of together with the product;
- g) a non-permeable tea, coffee or other beverage system single-serve unit intended for use in a machine and which is used and disposed of together with the product.³

3.2 Semi-finished products

Product that is delivered after partial processing but requires further processing to become ready for use.⁴

3.3 Polymer

Substance consisting of molecules characterized by a chain of one or more types of monomer units.⁵ These molecules must fall within a specific molecular weight range, where the differences in molecular weight are primarily due to variations in the number of monomer units.

A polymer includes the following:

- a) A simple majority by weight of molecules containing at least three monomer units, each of which has formed a covalent bond with at least one additional monomer unit or other reactant;
- b) Less than a simple majority by weight of molecules with the same molecular weight.

Within this definition, a "monomer unit" refers to the bonded form of a monomer substance in a polymer.⁶

3.4 Plastics

Materials composed of a polymer [as defined in Article 3(5) of Regulation (EC) No. 1907/2006 of the European Parliament and of the Council], to which additives or other substances may have been added, and which can serve as the main structural component of final products, excluding natural polymers that have not been chemically modified.⁷

These compounds may also include other substances or materials. The raw materials for plastics are naturally based (fossil or renewable resources), which are deliberately transformed into polymeric materials through chemical reactions. These include elastomers, thermoplastics, and thermosets.⁸

This definition does not differentiate based on the raw materials for polymers that are naturally based (fossil or renewable resources) and are specifically manufactured into polymeric materials

³ Cf. Regulation (EU) 2025/40 of the European Parliament and of the Council of 19 December 2024 on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC, Article 3(1)

⁴ Cf. DIN EN 12258-1:2012-08

⁵ Cf. IUPAC Compendium of Chemical Terminology (the "Gold Book")

⁶ Cf. Article 3(5) of Regulation (EC) No. 1907/2006 (REACH Regulation); EWKVerbotsV (§2 Nr.2)

⁷ Cf. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH); DIN EN ISO 472/A1:2019-03

⁸ Cf. Regulation (EU) No. 10/2011; DIN EN 13130-1; DIN EN ISO 472

through chemical reactions.

3.5 Polymer Microparticles / Microplastics

Solid, water-insoluble plastic particles or objects up to a size of 5000 µm (5 mm).⁹

The certification flustix PLASTICFREE - Product Content Microplastic-free considers microplastics with a particle size starting from 1 µm.¹⁰

The term "polymer microparticles" is understood to mean microplastics.

Note 1 to the Definition:

The following polymers (microparticles/microplastics) are excluded from the term "polymer microparticles":¹¹

- a) Polymers that are the result of a polymerization process occurring in nature, regardless of the method of extraction, and are not chemically modified substances;
- b) Polymers that are demonstrably degradable:
 - According to Annex 15 of Regulation (EU) No 2055/2023 (refer to Entry 78 - Regulations on proof of degradability according to OECD guidelines, L 238/83 ff.);
 - Listed in the [DID List Part A](#) and indicated therein as biodegradable under both aerobic (R) and anaerobic (Y) conditions. For detergents, lack of anaerobic biodegradability may be accepted if non-toxic hazard to the aquatic environment can be demonstrated (hazard classes H400 and H412), provided that the concentration of the substance in the product is ≤ 10%;¹²
- c) Polymers that are demonstrably soluble at over 2 g/l according to Annex 16 of Regulation (EU) No 2055/2023 (refer to Entry 78 - Regulations on proof of solubility, L 238/88 ff.);¹³

Note 2 to the Definition:

An EU legal definition of the term "microplastics" is laid down in Annex XVII of Regulation (EC) No 1907/2006 of the European Council on the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) regarding synthetic polymer microparticles, Entry 78. In the event of changes to the term "microplastics," it is intended that these will be adapted in Annex XVII of Regulation (EC) No 1907/2006 of the European Council on the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH).

Based on Article 68, paragraph 1 of Regulation (EC) No 1907/2006 of the European Council on the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH), restrictions on the marketing of polymer microplastic particles for the following uses and transition periods apply according to Regulation (EU) No 2055/2023, L 238/78 ff.:

- a) from October 17, 2029, for synthetic polymer microparticles used in the encapsulation of fragrances;
- b) from October 17, 2027, for rinse-off products as defined in paragraph 1(a) of the preamble of Annexes II to VI of Regulation (EC) No 1223/2009, unless these products fall under

⁹ Cf. Regulation (EU) 2023/2055 of the Commission dated 25 September 2023 amending Annex XVII to Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) with respect to synthetic polymer micro particles, ANNEX XVII Entry 78

¹⁰ Cf. DIN/TS 10068:2022-09; PROPOSAL FOR A RESTRICTION, VERSION NUMBER: 1, DATE: 11 January 2019, European Chemicals Agency (ECHA), Annankatu 18, PO BOX

¹¹ Cf. Amended ANNEX XVII, Entry 78 of Regulation (EC) No 1907/2006 by Regulation (EU) No 2055/2023 of 25.09.2023

¹² Cf. EU Ecolabel User Manual for Detergents, Version 1.5, February 2024, Section 2.2.2

¹³ Cf. Evidence of potential degradability is to be demonstrated in accordance with the OECD guidelines in Annex 15 and/or solubility in accordance with the OECD guidelines in Annex 16 of Regulation (EU) No. 2055/2023 for products, semi-finished products, or materials. Acceptable proof include test reports (see Regulation (EU) No. 2055/2023, Article 13) or recognized certificates. Compliance with all requirements must be demonstrated in accordance with the award criteria.

- paragraph (a) of this section or contain synthetic polymer microparticles used as abrasives, i.e., for exfoliating, polishing, or cleaning (hereinafter 'microbeads');
- c) from October 17, 2035, for lip products as defined in paragraph 1(e) of the preamble of Annexes II to VI of Regulation (EC) No 1223/2009, for nail products as defined in paragraph 1(g) of the preamble of Annexes II to VI of the aforementioned regulation, and for makeup products falling within the scope of the aforementioned regulation, unless these products fall under paragraphs (a) or (b) of this section or contain microbeads;
 - d) from October 17, 2029, for leave-on products as defined in paragraph 1(b) of the preamble of Annexes II to VI of Regulation (EC) No 1223/2009, unless these products fall under paragraphs (a) or (c) of this section;
 - e) from October 17, 2028, for detergents as defined in Article 2(1) of Regulation (EC) No 648/2004, waxes, polishes, and air fresheners, unless these products fall under paragraph (a) of this section or contain microbeads;
 - f) from October 17, 2029, for products as defined in Regulation (EU) 2017/745 of the European Parliament and of the Council, unless these products contain microbeads;
 - g) from October 17, 2028, for fertilizer products as defined in Article 2(1) of Regulation (EU) 2019/1009, which do not fall within the scope of the aforementioned regulation;
 - h) from October 17, 2031, for plant protection products as defined in Article 2(1) of Regulation (EC) No 1107/2009 of the European Parliament and of the Council, and treated seeds with these products, as well as biocidal products as defined in Article 3(1)(a) of Regulation (EU) No 528/2012 of the European Parliament and of the Council;
 - i) from October 17, 2028, for products for agricultural or horticultural uses, not covered by paragraphs (g) or (h);
 - j) from October 17, 2031, for infill granules for synthetic sports surfaces.

3.6 Primary Microplastics

Primary microplastics, as described in this certification scheme, refer to industrially manufactured plastic particles as defined in section 3.5, used as additives in cosmetics, agricultural products, and/or laundry, cleaning, and washing products. In this certification scheme, microplastics are defined and tested according to section 3.5.

3.7 Unavoidable Residues

Unavoidable residues refer to substances or materials that remain in the product or semi-finished product after the production process, such as plastics that may result from migration from packaging materials, contamination by environmental influences, residues in used materials, impurities in the manufacturing process, the use of recycled materials, or during packaging, transport, storage, handling, and placement.¹⁴

Such unavoidable residues in microplastic-free products or semi-finished products certified under this certification scheme must not be present to confer a desired property, in mixtures at concentrations of 0.1% by weight or more.¹⁵

Information on the limit value must always be precisely stated in test reports from the testing laboratory conducting the examination.

¹⁴ Cf. DIN ISO 13022:2014-06

¹⁵ Cf. ANNEX XV RESTRICTION REPORT, PROPOSAL FOR A RESTRICTION, VERSION NUMBER: 1, DATE: 11 January 2019, European Chemicals Agency (ECHA), Annankatu 18, PO BOX; Regulation (EC) No 1907/2006 of the European Council concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH), Article 14, Paragraph 2; DIN/TS 10068:2022-09, Paragraph 6.4.3.6.2 Quantification with external calibration

4 Requirements for PRODUCT CONTENT MICROPLASTIC-FREE

A product content is considered free from microplastics if it consists of materials, components, or substances that do not contain primary microplastics $\leq 0,1\%$ by weight as defined in Section 3, with a size starting from 1 μm .

The method of production, transport before and after acquisition by the consumer, the tools or processors used, and their presentation by the point of sale have no influence on the certification regarding microplastic-free status.

5 Laboratory Testing

5.1 General Information

For the required tests that serve as the basis for the evaluation and certification of products and semi-finished products, the certification partner relies on laboratories recognized by them.

5.2 Types of testing

5.2.1 Initial Test (Type Test)

The initial test includes a type test (prototype test, design test) aimed at determining whether the product or semi-finished product meets the requirements of Section 4 of this certification scheme.

5.2.2 Monitoring Test (Control Test)

The monitoring test is conducted every two years to determine whether the certified product or semi-finished product during the production phase corresponds to the type-tested products or semi-finished products. The laboratory test is commissioned by the certification partner and requires a timely positive test report as proof.

The scope of the surveillance test corresponds to that of the initial test as per Section 5.2.1.

5.2.3 Supplementary Test

A supplementary test is conducted when supplements, extensions, or changes (see Section 6.10) are made to certified products or semi-finished products that affect compliance with the requirements of this certification scheme. A supplementary test may also be necessary if there are indications or suspicions of deliberate but uncommunicated changes to products or semi-finished products. The nature and scope of the supplementary test are individually determined by the certification partner in consultation with the testing laboratory.

5.2.4 Special Test

Special tests are carried out:

- in the case of identified defects
- after a production break of more than 6 months
- upon justified request of the testing partner
- upon written request of third parties, if they have a special interest in maintaining proper market operations in competitive or qualitative terms

The type and extent of a special test are determined according to the purpose in each individual case by the certificate issuer in coordination with the testing partner. If defects are identified during

a special test or the special test is due to a production break, the certificate holder bears the costs of the procedure. If special tests are carried out at the request of third parties and no defects are identified, the requesting third party bears the full costs.

5.3 Sampling Procedure

To conduct the initial and surveillance tests, the applicant (manufacturer or distributor) typically provides test samples for each requested product or semi-finished product as per the previously communicated requirements to the designated testing laboratory and to flustix. The applicant bears the cost of these samples. At the same time, the applicant submits all documents, such as information on composition and ingredients, along with the corresponding test samples to flustix and/or directly to the designated testing laboratory upon request.

5.4 Test Procedure

5.4.1 General Information

After receiving the submitted documents, the certification partner prepares a certification offer including laboratory testing. Following the submission of the application and the presentation of the documents, at least one test per type (see Section 6.2) is conducted by the testing laboratory according to Section 6.1.

Should it not be possible to determine the microplastic content to be identified based on the result of the analytical testing, further analyses may be required in individual cases to ascertain the microplastic content present. If an individual examination must be conducted, the applicant will be contacted by the product manager. Prior to the execution of the analytical testing, the applicant must confirm the additional examination and bear the associated costs.

5.4.2 Testing of Products and Semi-finished products with Microplastic-free Product Content

The objective of the test is to analyze soluble goods (products or semi-finished products) like detergents or cosmetics for the presence of microplastics. This involves determining whether microplastics ($\geq 1 \mu\text{m}$) is present in the product or semi-finished product that does not dissolve upon use and constitutes more than 0.1% by weight. Microplastics are detected through filtration and spectroscopic or thermoanalytical methods such as RAMAN microscopy or (ATR-)FTIR spectroscopy¹⁶ and TED-GC/MS or Py-GC/MS.¹⁷ If the spectrum can be attributed to plastic, the solid content (G) is determined to make a statement about the microplastic content.

Expected results of the test are:

- A product can be declared microplastic-free if $G \leq 0.1\%$ or if $G > 0.1\%$ and the solids are microplastic-free ingredients.
- A product cannot be declared microplastic-free if $G > 0.1\%$ and the solids contain microplastics.

The testing basis for determining microplastics in products is specified by methods for sampling, sample preparation, and characterization of microplastics in foods.¹⁸ These procedures have been established for microplastics sized $1 \mu\text{m}$ to 1 mm and from 1 mm to 5 mm . The laboratory analysis of particles $< 1 \mu\text{m}$ is currently not established.¹⁹

¹⁶ Cf. ISO/DIS 16094-2

¹⁷ Cf. ISO/DIS 16094-3

¹⁸ Cf. DIN EN ISO 24187:2024-04; DIN/TS 10068:2022-09

¹⁹ Cf. DIN/TS 10068:2022-09

Addition:

If no laboratory analytical testing procedure for particles up to 0.1 µm is established by 2026, an additional document review may be used.

Basis 1 for the Addition:

According to the Cosmetics Regulation (EC) No 1223/2009, Article 19, paragraph 1, manufacturers are required to list the ingredients, i.e., components deliberately (primarily) added during the manufacturing process on the packaging. Nanomaterials must be specifically included: all components in the form of nanomaterials must be clearly listed in the ingredients list. The name of these components must be followed by the word "nano" in brackets. A safety report must also document the qualitative and quantitative composition.²⁰

Basis 2 for the Addition:

For detergents, their content must be disclosed to the certification partner and the recognized testing partner in the form of binding data sheets according to the requirements of the Detergents Regulation (EC) No 648/2004, where all ingredients are listed according to the regulation's requirements.²¹

5.5 Test Reporting

The designated testing laboratory submits the test report for conformity assessment to the certification partner. This must be presented to the certification partner in its original form, either digitally or in analog.

A test report should generally not be older than six months for submission. Under certain circumstances, older test reports may also be accepted, provided that the testing laboratory confirms in writing the accuracy of the information contained therein.

Such a test report must meet the requirements of DIN EN ISO/IEC 17025 and include the following information:

- Name and address of the applicant
- Name and address of the submitting applicant if they are not the manufacturer
- The basis of the test, including the date of the certification scheme issue
- The type of test (such as type or supplementary test)
- The date the test was conducted
- The results and assessment of the test conducted
- The name and signature of the person responsible for the test
- A detailed description of the product with a picture and dimensions for clear identification of the tested sample and documentation of the INCI list

6 Certification

Certification according to this certification scheme pertains to the conformity assessment of products and semi-finished products performed by a certification partner based on test reports from recognized testing laboratories.

The products or semi-finished products to be certified are evaluated for their compliance with the criteria set out in Section 4, and the results are subsequently verified.

The right to use the certification mark "flustix PLASTICFREE - Product Content Microplastic-Free" is granted upon the issuance of a corresponding certificate by the responsible certification partner.

²⁰ Cf. Article 19, Paragraph 1 of the Cosmetics Regulation, Annex I, Part A, L 342/79

²¹ Cf. Detergents Regulation (EC) No 648/2004, Article 11, Paragraph 3 / Article 9, Paragraph 3 on labeling, Annex VII, Section A, Section C

6.1 Application for Certification

Manufacturers according to § 4 ProdHaftG or traders who bring products, or semi-finished products to the market in agreement with the certificate holder qualify as applicants.

The applicant must submit the following documents to the certification partner:

- Certification application in its original form with a legally valid signature
- A current test report according to Section 5.5 on an initial test according to Section 5.2.1, unless this is commissioned by the certification partner
- If required and upon request, submission of the "Positive Analysis Result" form
- On demand, the presentation for the product/packaging layout
- A description of the goods, product, packaging, or semi-finished product to be certified, including application and international trade identification number (e.g., EAN), if applicable
- A complete list of the product's ingredients. The listing shall be provided in descending order of the quantitative content of each substance. For every substance listed, the corresponding CAS number shall be indicated
- Safety Data Sheets (SDS) for critical substances
- Identification of substances included in the [DID List Part A](#) (including reference number) as evidence of potential biodegradability
- Evidence of potential degradability in accordance with the OECD guidelines in Annex 15 and/or solubility in accordance with the OECD guidelines in Annex 16 of Regulation (EU) No. 2055/2023 for products, semi-finished products, or materials. Acceptable proof include test reports²² or recognized certificates. Compliance with all requirements must be demonstrated in accordance with the award criteria

6.2 Classification of Types and Subtypes

6.2.1 Types

Microplastic-free products or semi-finished products that differ in essential, certification-relevant properties are categorized as separate models or types. Such characteristics may include the use of different materials or properties that significantly affect safety, functionality, or handling, and are therefore offered under a separate type/model in the market.

Certification-relevant characteristics include, for example:

- Ingredients
- Product characteristics that go beyond differences in dimensions
- Chemical structures
- Formulations

A separate certificate is issued for each type.

6.2.2 Subtypes

Subtypes are variants of a model/type that differ in non-relevant characteristics from a testing and certification perspective, e.g., in the size of a product.

Several subtypes can be combined on a certificate of a (main) type/model.

The division into types and subtypes is made by the certification partner based on the composition of the products or semi-finished products to be certified.

²² Cf. Commission Regulation (EU) 2023/2055 of 25 September 2023 amending Annex XVII to Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards synthetic polymer micro particles, Article 13

6.3 Sub-Certificates

Sub-certificates are necessary when certified products are to be distributed in the name of companies other than the main certificate holder.

The issuance of sub-certificates is possible for all products defined within this certification scheme. They allow the marketing of certified consumer goods, products, or semi-finished products in the name of the sub-certificate holder. The validity of the sub-certificate is contingent upon the main certificate. The products may not be modified by the holder of the sub-certificate (except for printing).²³

Necessary documents and information required for application:

- a) Application form with stamp and signature
- b) Consent form for sub-certificates with signatures of both the main and sub-certificate holders.
Declaration by the sub-certificate holder that the products of the main certificate holder will be distributed unaltered, except for printing

The issuance of a sub-certificate can occur

- with its own register number
- with the register number of the main certificate holder

6.4 Conformity Assessment

Based on the submitted documents, the certification partner conducts the conformity assessment. This is particularly done based on the test report to assess whether the consumer goods content, product, or semi-finished product meets the requirements of the certification scheme.


Any deviations are communicated to the applicant in writing by the certification partner.

Should the conformity assessment indicate that the product does not comply with the specified certification requirements pursuant to Section 4, the applicant shall be given the opportunity to send another sample to the designated testing laboratory. The applicant shall bear the costs of the analytical testing for all additional samples. If the result of the test report from the repeated analytical testing again does not meet the requirements, the conformity assessment shall be deemed failed.

6.5 Issue of the Certificate and right to use the Certification Mark

After a positive evaluation and conformity confirmation of the submitted documents, the applicant is granted the certificate as well as the right to use the corresponding certification mark "flustix PLASTIKFREI" together with an associated registration number.

²³ Cf. Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment; Commission Guidelines on single-use plastic items in accordance with Directive (EU) 2019/904 of the European Parliament and of the Council on the reduction of the impact of certain plastic products on the environment (2021/C 216/01); PROPAKMA (2023) "Private Expert Opinion on the Definition of the Plastic Content in the Printing of Fiber-Based Service Packaging (using the example of a coffee cup) for the Assessment of the Plastic Content."

Certification object	Structure register number	Certification mark
Product Content Microplastic-free	FPMX000	

Products or semi-finished products that are authorized to bear the "flustix PLASTIKFREI" certification mark may only use this certification mark in conjunction with the associated registration number.

The certification mark and the associated registration number are valid exclusively for the specific type for which the certificate was issued. This must correspond exactly to the type-tested product or semi-finished product.

A unique registration number is assigned to each type. Different versions or subtypes of a particular type will use the same registration number, as described in Section 6.2.

6.6 Publications

Information about all certificate holders can be accessed at any time on www.flustix/certified.com. Economic actors, manufacturers, users, and consumers utilize this resource to research certified products.

6.7 Validity of the Certificate

The validity of the certificate is six years, and the expiry date is noted on the certificate. With the expiration of the certificate, the right to use the certification mark also expires.

6.8 Renewal of the Certificate

To continue the certification beyond the date stated in the certificate, a current positive test report must be submitted to the certification partner in a timely manner. Based on this report, a renewed conformity assessment is conducted.

Compliance with the requirements according to the testing and certification bases in Section 2 is demonstrated with the scope of an initial test according to Section 5.2.1, which is reviewed by the certification partner.

6.9 Expiry of the Certificate

The certificate and the right to use the "flustix PLASTICFREE" certification mark along with the registration number automatically expire after the validity period if no timely conformity assessment according to Section 5 is carried out.

Furthermore, the certificate may be canceled if:

- The monitoring tests according to Section 8 are not carried out on time or in full
- The "flustix LESS PLASTICS" certification mark is misused by the certificate holder
- The requirements of the certification scheme or associated documents are not met
- The due certification fees are not paid on time
- The conditions for the issuance of the certificate are no longer met.

6.10 Modification/Amendment

6.10.1 Modification/Amendment of a Product or Semi-finished product

Certificate holders must immediately report all changes affecting the subject of certification to the certification partner. In consultation with the testing laboratory, the certification partner decides on the necessity and scope of a review according to Section 5.2.3 and whether it constitutes a significant modification. The testing laboratory reports the results of this review to the certification partner. If the certification partner recognizes a significant modification, the certificate and registration number become invalid. A new application for initial certification and the use of the "flustix PLASTICFREE" certification mark can be submitted for the modified product. Certificate holders are also obligated to communicate any formal changes (e.g., changes to the certificate holder or their address). For additional variants (subtypes) of the same type, an extension of the existing certificate can be requested. The certification partner decides whether an additional review is necessary. If the conditions are met, these variants will be included in the certificate of the already certified product and thus become part of it.

6.10.2 Evaluation of Test Specifications

Changes to the certification basis will be communicated to the certificate holder in writing and must be implemented no later than the next monitoring test. In individual cases, supplementary testing may be required.

6.11 Rectification of Defects in the Product or Semi-finished product

If defects in certified products or semi-finished products are identified in the market, the certification partner will request the holder (manufacturer/distributor) in writing to correct the defects.

The holder must ensure that products or semi-finished products are not labeled with the certification marks until the defects are rectified.

The defects must also be corrected immediately on already installed or stored items. Within 3 months, the manufacturer must prove to the certification partner through a test report on a special test according to Section 5.2.4 that the defects have been rectified and the items meet the requirements again.

If the holder does not meet these deadlines, the certificate and the right to use the "flustix PLASTICFREE" certification mark will be revoked. In the case of persistent defects, the certification partner will initially suspend the certificate and set a final deadline for defect rectification. If the request is not complied with or not met in a timely manner, or if defect rectification is not proven again, the certificate will be forfeited.

7 Self-Monitoring by the Manufacturer

The manufacturer must ensure through appropriate quality assurance measures that the certified properties of the goods, products, or semi-finished products are maintained. This is achieved through a factory production control (FPC) tailored to the product, semi-finished product, or production process, and additionally through measures within the framework of a quality management system (QM system) according to the DIN EN ISO 9000 ff. standard series. Recommended is the implementation and submission of a current certification of a quality management system according to the DIN EN ISO 9000 ff. standard series.

8 External Monitoring by the Certification Partner

A central aspect of certification is the continuous monitoring of the certified product or semi-finished product throughout the entire validity period of the certificate. This monitoring is carried out at two-year intervals. As part of these regular monitoring tests, the certification partner verifies and assesses whether the product continues to meet the requirements defined in the certification scheme as described for the initial test in Section 5.2.1.