Certification programme

flustix RECYCLABLE

according to

DIN EN ISO 14021, minimum standard for packaging in accordance with Section 21 (3) of the Packaging Act (VerpackG) and taking into account Regulation (EU) 2025/40 on packaging and packaging waste (Packaging and Packaging Waste Regulation – PPWR)

(as of 01/2025)

Foreword

flustix RECYCLABLE – Certification programme for recyclable packaging in accordance with DIN EN ISO 14021, minimum standard in accordance with Section 21 (3) of the Packaging Act (VerpackG) and taking into account Regulation (EU) 2025/40 on packaging and packaging waste (Packaging and Packaging Waste Regulation – PPWR)

The design of packaging plays a central role in the functioning of a modern circular economy. A high degree of recyclability is an essential prerequisite for packaging to be returned to technical material cycles as a secondary raw material after use. Therefore, aspects such as sortability, material compatibility and actual recyclability within existing collection and recycling structures must be taken into account as early as the development phase of packaging.

The DIN EN ISO 14021 standard provides an internationally recognised set of rules for environmental claims made by suppliers. Among other things, the standard defines requirements for the use of the term "recyclable" and ensures that corresponding environmental claims are comprehensible, verifiable and not misleading.

In Germany, this standard is specified in more detail by the minimum standard for assessing the recyclability of packaging subject to system participation in accordance with Section 21 (3) of the Packaging Act (VerpackG). This minimum standard is published and regularly updated by the Central Agency Packaging Register (ZSVR). It forms an essential basis for the technical assessment of the recyclability of packaging on the German market.

At European level, the importance of recyclable packaging design is further underlined by Regulation (EU) 2025/40 on packaging and packaging waste (Packaging and Packaging Waste Regulation – PPWR). This regulation aims to align packaging more closely with the requirements of a functioning circular economy throughout its entire life cycle. This includes, in particular, requirements for design for recycling, the reduction of material complexity and improved sorting and recyclability of packaging within European collection and recycling structures.

The flustix RECYCLABLE certification programme creates a structured framework for the independent assessment of the recyclability of packaging. It is based on the requirements of DIN EN ISO 14021, the current minimum standard under the Packaging Act, and relevant European regulatory developments, particularly in the context of Regulation (EU) 2025/40 on packaging and packaging waste.

The certification enables manufacturers, brand owners and distributors to demonstrate the recyclability of their packaging in a transparent and traceable manner. Independent testing and certification ensures that the underlying requirements are applied consistently and that the assessment of recyclability is based on traceable technical criteria.

Certification is carried out by qualified and independent certification partners in conjunction with recognised testing institutions. It includes both the assessment of the packaging design and the testing of relevant criteria for sortability and recyclability within existing collection and recycling systems.

Through a combination of clearly defined testing requirements, independent certification and transparent labelling, the flustix RECYCLABLE programme supports companies in documenting the recyclability of their packaging in a transparent manner and presenting it reliably to market partners and consumers.

flustix RECYCLABLE – History of certification
In April 2021, flustix, in cooperation with its certification partners, began evaluating and certifying packaging in the circular economy based on the "flustix RECYCLED" certification programme. This was based on versions 04.2021 / 05.2021 / 01.2025.

In 2025, as part of the further development of its certification system, flustix developed an independent certification programme for assessing the recyclability of packaging. This was published in March 2025 under the title "flustix certification programme for awarding the flustix RECYCLABLE seal".
This certification programme is valid from January 2025.

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1 Classification and objectives of the certification programme

This certification programme applies to the assessment of the recyclability of packaging and, in combination with the test criteria listed below, includes all requirements for the award of the flustix RECYCLABLE certification mark.

1.1 Objective of the certification programme

The flustix RECYCLABLE certification programme serves to independently assess and certify the recyclability of packaging. The aim of the programme is to verify in a transparent manner whether packaging is fundamentally suitable for existing collection, sorting and recycling processes, taking into account its material structure, design and composition. The certification enables manufacturers, brand owners and distributors of packaging to have the recyclability of their packaging tested on the basis of defined technical criteria and documented by an independent certification process. The certification creates a transparent and verifiable basis for corresponding environmental claims.

The certification programme is aimed at companies along the entire packaging value chain, in particular packaging manufacturers, fillers, brand owners and trading companies.

1.2 Contribution to the circular economy

The recyclability of packaging is a central component of a functioning circular economy. Packaging must be designed in such a way that it can be collected, sorted and recycled as efficiently as possible after use. Recycling-friendly packaging design therefore takes into account aspects such as material selection, material combinations, sortability and technical recyclability within existing recycling structures as early as the development phase.

The flustix RECYCLABLE certification programme supports companies in systematically assessing the recyclability of packaging and reviewing design decisions in line with a design-for-recycling approach. In this way, the programme contributes to improving the recycling of packaging materials and promoting the use of secondary raw materials.

1.3 Reference to regulatory requirements

The recyclability assessment within the framework of this certification programme takes into account existing international, national and European regulations. The basis for the use of the environmental claim "recyclable" is the DIN EN ISO 14021 standard. This standard defines requirements for self-declared environmental claims and specifies the conditions under which a claim regarding the recyclability of products and packaging is permissible. For the German market, the assessment of recyclability is further specified by the minimum standard for measuring the recyclability of packaging subject to system participation in accordance with Section 21 (3) of the Packaging Act. This minimum standard is published and regularly updated by the Central Agency Packaging Register (ZSVR). At European level, requirements for packaging design are increasingly determined by Regulation (EU) 2025/40 on packaging and packaging waste (Packaging and Packaging Waste Regulation – PPWR). This regulation aims to align packaging more closely with the requirements of a functioning circular economy and sets out requirements for the recyclability of packaging, design for recycling and the improvement of material cycles within the European Union, among other things.

This certification programme takes these regulatory conditions into account and creates a structured basis for the technical assessment of the recyclability of packaging.

2 Testing and certification principles

2.1 General principles of assessment

The assessment of the recyclability of packaging within the framework of the flustix RECYCLABLE certification programme is based on defined technical and regulatory requirements. The aim of the assessment is to determine in a comprehensible manner whether a packaging is fundamentally suitable for existing collection, sorting and recycling processes, taking into account its material structure, design and composition. The test takes into account both the technical recyclability of individual materials and the interactions between different packaging components within a packaging system. The assessment is based on recognised technical standards, regulatory requirements and established assessment methods for analysing packaging structures and their recyclability within existing recycling infrastructures.

2.2 Normative and regulatory reference systems

Recyclability is assessed taking into account relevant international, national and European regulations. A central basis is the DIN EN ISO 14021 standard, which specifies requirements for self-declared environmental claims and, among other things, defines criteria for the use of the term "recyclable". For the German market, the assessment of recyclability is further specified by the minimum standard for measuring the recyclability of packaging subject to system participation in accordance with Section 21 (3) of the Packaging Act. This minimum standard is published and regularly updated by the Central Agency Packaging Register (ZSVR) and represents an essential reference framework for the technical assessment of packaging. In addition, relevant European regulatory developments are taken into account in the assessment of recyclability, in particular Regulation (EU) 2025/40 on packaging and packaging waste (Packaging and Packaging Waste Regulation – PPWR), which defines requirements for the design and recyclability of packaging in the European single market.

2.3 Programme-specific regulations

In addition to the aforementioned normative and regulatory principles, certification under the flustix RECYCLABLE programme is based on the requirements and assessment methods described in this document. These include, in particular, criteria for assessing packaging design, material composition and the technical recyclability of packaging within existing collection and recycling structures. The certification principles also include the applicable general terms and conditions of the certification body, the relevant regulations for carrying out certification procedures, and the requirements for test reports and conformity assessments by recognised testing bodies or testing institutes.

2.4 Application of the testing and certification principles

For dated references to standards or regulatory documents, the version specified in the certification programme applies. For undated references, the currently valid version of the relevant regulations, including all amendments or additions, applies. Changes in the underlying standards or regulatory requirements may necessitate an adjustment of the assessment principles or certification requirements. In such cases, the certification body shall inform the certificate holders of any necessary adjustments and of possible transitional arrangements for the continuation of existing certifications.

3 Terms and definitions

The following definitions apply to the application of this certification programme. The definitions serve to ensure a uniform interpretation of the requirements and a clear delimitation of the subject of certification within the framework of the assessment of the recyclability of packaging. The terms used in this certification programme are based on common definitions in the packaging and recycling industry and on relevant regulatory requirements.

3.1 Packaging system

A packaging system is defined as all components of a package that are used together to contain, protect, store or transport a product. This includes, in particular, the packaging body itself and all functional components such as lids, closures, labels, sealing films, barrier elements, coatings or adhesive bonds. The entire packaging system is always considered when assessing recyclability.

3.2 Packaging type

A packaging type refers to packaging with clearly defined material and design properties. Packaging is considered to be of the same type if it is identical in terms of material structure, the materials used and its design, and if this does not result in any differences in the assessment of recyclability.

3.3 Packaging variant

Packaging variants are versions of a packaging type that may differ in individual characteristics without these differences affecting the assessment of recyclability. Such variants may include differences in colour, graphic design or irrelevant details of the packaging.

3.4 Packaging group

Several packaging variants can be combined into a packaging group, provided that they are identical in terms of their material structure and properties relevant to recyclability. Grouping serves to streamline certification procedures when several types of packaging are based on the same design and material properties.

3.5 Recyclability

Recyclability describes the fundamental suitability of packaging or a packaging system to be collected, sorted and recycled after use within existing collection, sorting and recycling structures. The assessment takes into account both the technical properties of the materials and the compatibility of the packaging with existing sorting and recycling processes.

3.6 Subject of certification

The subject of certification is the specifically defined packaging or packaging group whose recyclability is assessed as part of the certification programme. The certification refers exclusively to the design of the packaging that has been tested and documented in the certification process.

3.7 Certificate holder

The certificate holder is the company that has been awarded a certificate for a specific packaging or packaging group after successfully completing the certification process. The certificate holder is responsible for complying with the requirements of this certification programme and for the proper use of the certification mark.

3.8 Certification body

The certification body is the organisation responsible for carrying out the certification procedure. It checks the submitted documents, evaluates the results of the technical tests and decides on the granting, maintenance, suspension or withdrawal of certificates.

3.9 Testing laboratory

A testing laboratory is an independent institution that carries out technical examinations and assessments as part of the certification process. The testing laboratory prepares test reports that serve as the basis for the conformity assessment by the certification body.

3.10 Sublicensees

Sublicensees are companies within the supply chain that are authorised to use the flustix RECYCLABLE mark for identical packaging on the basis of an existing certificate. The prerequisite is that the packaging in question corresponds to the certified reference packaging in terms of material technology and design.

4 Requirements for packaging

The packaging requirements form the basis for assessing recyclability within the flustix RECYCLABLE certification programme. The aim of the requirements is to ensure that packaging can be collected, sorted and recycled within existing collection, sorting and recycling structures, taking into account its material structure, design and composition.
Recyclability is assessed taking into account recognised technical standards and regulatory requirements. The basis for this is, in particular, the requirements of DIN EN ISO 14021 and the current minimum standard for assessing the recyclability of packaging subject to system participation in accordance with Section 21 (3) of the Packaging Act.
In addition, the certification programme takes into account current European regulatory developments in the field of circular economy, in particular the requirements of Regulation (EU) 2025/40 on packaging and packaging waste (Packaging and Packaging Waste Regulation – PPWR), which defines requirements for recyclable packaging design and the improvement of material cycles within the European Union.

4.1 Basic requirements for recyclable packaging

For the purposes of this certification programme, packaging is considered recyclable if, taking into account its complete packaging system, it is suitable for collection, sorting and material recycling after use within existing collection, sorting and recycling processes.
The assessment is generally carried out for the unfilled packaging as a whole, including all functional packaging components. These include, in particular, packaging bodies, closures, labels, sealing films, barrier elements, coatings, adhesives and other structural components of the packaging.
The assessment takes into account both the technical properties of the materials used and the interactions between individual components within the packaging system.

4.2 Requirements for packaging (design for recycling)

Packaging must be designed in such a way that it is compatible with existing collection, sorting and recycling structures. Therefore, design and material aspects that enable high-quality material recycling must be taken into account as early as the development phase of a packaging product. This includes, in particular, the selection of recyclable materials, the avoidance of unnecessary material complexity, and a packaging design that supports efficient sorting and processing within existing recycling processes.
Multi-layer material combinations or design solutions that make it technically difficult or impossible to separate the materials used can limit the recyclability of the packaging.
The assessment therefore examines whether the design of the packaging enables material recycling under realistic conditions of the existing recycling infrastructure. The assessment of the packaging takes into account, in particular, aspects of sortability, material compatibility and material recyclability in the existing recycling infrastructure system.

4.3 Material-related requirements

The materials used must be compatible with existing collection, sorting and recycling structures.
Materials, additives or coatings must not impair the recycling process in such a way that material recycling within established recycling processes is technically prevented or significantly restricted.
The assessment takes particular account of material properties that may influence sortability, separability, processability or the quality of the secondary raw materials obtained in the recycling process.

4.4 Requirements for packaging systems and packaging components

Recyclability is always assessed at the level of the complete packaging system. Packaging can consist of several components that together serve to contain, protect, store or transport a product. These include, for example, closures, lids, labels, sealing films, barrier elements, coatings or adhesive bonds.
The individual components must be designed in such a way that they can either be recycled together with the main material or can be sufficiently separated within existing sorting processes.
Packaging systems must not have any design features that prevent the sorting or recycling of the majority of the packaging material.

4.5 Exclusion criteria and recycling-related restrictions

Packaging cannot be assessed as recyclable under this certification programme if essential design or material properties prevent material recycling within existing collection, sorting and recycling processes.
This may be the case in particular if the materials or combinations of materials used prevent sorting, significantly impair the recycling process or reduce the quality of the secondary raw materials obtained to an unacceptable degree.
The assessment is carried out as part of the technical test, taking into account the recycling technologies available in each case and the existing collection and sorting infrastructure.

5 Tests

5.1 General

The recyclability of packaging is assessed within the framework of this certification programme on the basis of technical tests and a documented conformity assessment by an independent certification body.
The tests serve to determine whether packaging meets the requirements of this certification programme, taking into account its material structure, design and composition.
Testing institutes or testing laboratories recognised by the certification body may be used to carry out technical tests. These test the packaging submitted and the associated technical documentation with regard to its recyclability.
The assessment takes into account both the properties of the materials used and their behaviour within existing collection, sorting and recycling processes. In addition to analytical tests, technical assessments of the packaging design and the material combinations used may also be carried out.

5.2 Types of testing

Within the framework of this certification programme, a distinction is made between different types of tests, which can be carried out depending on the reason for and objective of the

certification procedure.
The type and scope of the test depend on the respective test purpose and the properties of the packaging to be evaluated.

5.2.1 Initial test

The initial test serves as the first assessment of a packaging item or packaging group as part of a certification procedure.
The aim of the initial test is to determine whether the packaging meets the requirements of this certification programme and can be assessed as recyclable in principle.
The initial test examines in particular the material structure, the composition of the packaging components and their compatibility with existing sorting and recycling processes.
The assessment is based on the technical documentation submitted and, if necessary, supplementary tests carried out by recognised testing institutes.

5.2.2 Monitoring test

The surveillance test serves to regularly check certified packaging during the term of the certificate.
It ensures that the packaging assessed during the initial assessment continues to meet the requirements of this certification programme and that no changes have been made that affect its recyclability.
Surveillance tests are carried out at regular intervals and may include both document-based assessments and technical tests of the packaging.

5.2.3 Supplementary test

A supplementary test is carried out if changes have been made to certified packaging that may affect the assessment of recyclability.
This applies in particular to changes in the material composition, packaging design or individual packaging components.
The certification body decides on the type and scope of the supplementary test required based on the information submitted.

5.2.4 Special test

Special tests may be carried out if special circumstances require a certified packaging to be reassessed.
This may be the case, for example, if there are indications of possible deviations from the certification requirements or if there are justified doubts about the conformity of certified packaging.
A special test may also be initiated in the event of prolonged production interruptions or special market observations.
The type and scope of a special inspection are determined by the certification body on a case-by-case basis.

5.3 Provision of samples

Suitable packaging samples and the associated technical documentation must be provided for the tests to be carried out.
The packaging samples are usually sent to the commissioned testing institute by the applicant or manufacturer.
The number of samples required depends on the type and scope of the planned test and is agreed between the certification body and the testing institute.

5.4 Testing

Once the required documents and packaging samples have been received, the commissioned testing institute checks whether the information submitted is sufficient for an assessment of recyclability.

This is followed by a technical examination of the packaging, taking into account the relevant material and design characteristics.
The following aspects in particular may be assessed as part of the test:
Structure and composition of the packaging materials
Sortability of the packaging within existing sorting systems
Compatibility of the materials used with existing recycling processes
Possible material properties or components that may impair the recycling process
If necessary, supplementary analytical investigations or technical tests may be carried out in order to reliably assess the recyclability of the packaging.

5.5 Test report

The results of the tests carried out are documented in a test report.
The test report serves as the basis for the subsequent conformity assessment by the certification body.
The test report must contain at least the following information:
Identification of the tested packaging or packaging group
Name and address of the manufacturer or applicant
Details of the test criteria applied
Description of the tests carried out
Evaluation of the results with regard to recyclability
Date of testing and name of the responsible tester
The test report is sent to the certification body for further evaluation as part of the certification process.

6 Certification

6.1 Basis for certification

Certification is based on the tests carried out as part of this certification programme and the evaluation of the technical documentation submitted.
The certification body evaluates the results of the tests and determines whether the tested packaging meets the requirements of this certification programme.
The decision on certification is made by the certification body on the basis of the complete assessment documentation. The conformity assessment is carried out as part of an independent certification procedure by a certification body responsible for this purpose.

6.2 Issuing of the certificate

If tested packaging meets the requirements of this certification programme, a certificate is issued. The certificate confirms that the tested packaging has been classified as recyclable within the meaning of this certification programme as part of the assessment carried out. The certificate is issued for the tested packaging or packaging group in question and contains, in particular, information on the applicant, the tested packaging and the period of validity of the certificate.

6.3 Validity of the certificate

The validity of the certificate is determined by the certification body. During the period of validity, it must be ensured that the certified packaging continues to meet the requirements of this certification programme. Changes to the material structure, composition or design of the packaging that may affect recyclability must be reported to the certification body immediately.

6.4 Changes to certified packaging

If changes are made to certified packaging that may affect the assessment of recyclability, the certification body shall decide on the necessary measures. This may include, in particular, a supplementary test or a reassessment of the packaging. Until the final assessment by

the certification body, the certificate may only be used for unchanged packaging.

6.5 Suspension or revocation

The certification body may suspend or revoke a certificate if it is determined that the requirements of this certification programme are no longer being met or if essential conditions of certification are not being complied with.
This applies in particular if changes have been made to the packaging that have not been reported, or if there are justified doubts about the conformity of the certified packaging.

6.6 Publication of certified packaging

Certified packaging can be registered by the certification body and will be kept in a public register by flustixin.
The register contains information about the applicant, the certified packaging and the validity of the certificate.

7 Certification mark and licence number

After successful certification, the applicant is granted the right to use the flustix RECYCLABLE certification mark for the tested packaging.
The certification mark may only be used for packaging that has been issued with a valid certificate under this certification programme.

Zertifizierungsgegenstand	Aufbau der Lizenznummer	Zertifizierungszeichen
RECYCLABLE	RECS0000	

The certification mark may only be used in conjunction with the corresponding licence number. The licence number enables a clear link between the mark used, the certified packaging and the associated certificate.
The certification mark may only be used in connection with the certified packaging.
Use for non-certified packaging or products is not permitted. The certification mark may not be used in a manner that could mislead about the scope or meaning of the certification. The specific design and permitted use of the certification mark are determined by the certification body.

8 Monitoring of certified packaging

8.1 General

An essential part of certification is the continuous monitoring of certified packaging throughout the entire term of the certificate. Monitoring serves to ensure that the certified packaging continues to meet the requirements of this certification programme and that no changes have been made that could affect the assessment of recyclability. Monitoring is carried out by the responsible certification body as part of regular monitoring measures.

8.2 Monitoring audits

Monitoring tests are carried out at regular intervals during the term of a certificate.
They serve to verify that the certified packaging continues to meet the requirements specified in the certification programme.
As part of the surveillance audit, both document-based assessments and technical tests of the packaging may be carried out.
The certification body determines the type and scope of the surveillance audit, taking into account the properties of the certified packaging.

8.3 Notification obligations of the certificate holder

The certificate holder is obliged to notify the certification body immediately of any changes to the certified packaging if these changes could influence the assessment of recyclability.
This applies in particular to changes in the material composition, the packaging design or individual packaging components.
The certification body decides on the necessary measures based on the information submitted.

8.4 Measures in the event of deviations

If deviations from the requirements of this certification programme are identified during monitoring, the certification body shall decide on the necessary measures.
This may include, in particular, additional tests, suspension of the certificate or revocation of the certificate.
The certification body shall inform the certificate holder of any deviations found and the resulting measures.

9 Entry into force

This certification programme shall enter into force upon publication of this version.
It replaces all previous versions of the flustix RECYCLABLE certification programme.
This certification programme shall apply from the date specified in the document.
Certification procedures already in progress may be completed in accordance with the previous regulations or transferred to this certification programme at the discretion of the certification body.