



# **Certification Scheme**

## **REAL Home Compostable Products**

according to

**NF T 51-800**

**and / or**

**AS 5810**

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## Foreword

Renewable Energy Assurance Limited (REAL) is a wholly owned subsidiary of not-for-profit organisation, the Association for Renewable Energy and Clean Technology (REA), carrying out a range of third-party certification and consumer protection activities.

REAL owns and administers the Compostable Materials Certification Scheme.

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REAL appoints certification bodies to provide the certification services, organisations with product certification expertise within their businesses. The certification bodies confirm to REAL whether products meet the requirements for use of the REAL 'Home Compostable' certification mark. The certification bodies are operating according to EN ISO/IEC 17065 and show compliance by holding and maintaining such accreditation.

Products certified under the Compostable Materials Certification Scheme can be certified as meeting the requirements of this scheme and/or the 'REAL Industrially Compostable Products' scheme. More information on the 'REAL Industrially Compostable Products' scheme can be found on [www.compostablematerials.org.uk](http://www.compostablematerials.org.uk).

This certification scheme is maintained by REAL and will be continuously improved, when applicable. For this, REAL will appoint a committee of dedicated experts with the certification bodies participating and a group of interested parties.

## Amendments

a) First issue

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## 1 Scope

The "REAL Home Compostable Products" is a certification scheme for the United Kingdom, which provides services to producers for the independent assessment and labelling of home compostable materials.

The "REAL Home Compostable Products" scheme provides consumers with assurance and confidence in certified materials. It also provides consumers with a platform to check the certification status of materials and identify the appropriate end-of-life options on the website: [www.compostablematerials.org.uk](http://www.compostablematerials.org.uk).

This certification scheme applies for the following products:

- a) Shopping bags
- b) Waste bags
- c) Food packaging
- d) Non-food packaging
- e) Films for packaging
- f) Tableware
- g) Cups
- h) Trays
- i) Food containers
- j) Straws
- k) Cutlery
- l) Coffee capsules
- m) Lids

There is no legal right to receiving a certificate or any other confirmation of conformity.

## 2 Test and certification specifications

For home compostable product certification, products are assessed against and certified to the standard:

*NF T 51-800:2015-11 ('Plastics — Specifications for plastics suitable for home composting).*

Additionally, or alternatively, products can also be assessed and certified against:

*AS 5810:2010 ('Biodegradable plastics—Biodegradable plastics suitable for home composting).*

The obligation to comply with laws and regulations governing the respective products is in no way affected by this certification scheme.

## 3 Product requirements

According to the requirements of NF T 51-800 and/or AS 5810, the following requirements apply:

- Compliance with the threshold values named in Table 1 in AS 5810 and/or Table 1 in NF T 51-800, respectively, and the control of constituents mentioned in Section 5.1 of NF T 51-800.
- Ultimate biodegradability (90 % absolute biodegradation, or 90 % with a suitable reference substrate within not more than 12 months) at ambient temperatures based on testing mentioned in the Normative References of NF T 51-800 and/or AS 5810, respectively. Evaluation criteria of both standards apply, respectively.
- After composting for no more than 180 days at ambient temperatures, not more than 10 % of the original dry weight of a test material shall fail to pass through a > 2 mm fraction sieve. Evidence must be demonstrated via a test according to Section 6.4 of NF T 51-800 and/or Section 5.5 of AS 5810.
- The germination rate and plant biomass of two plant species shall be more than 90 % of those from the corresponding blank compost according to OECD 208 with the modifica-

tions stated in BS EN 13432, Annexes A.4 and E. Evaluation criteria of Section 6.5 of NF T 51-800 and/or Section 5.6 of AS 5810 apply, respectively.

- According to AS 5810, the survival rate and mean weight of selected earthworm species *Eisenia fetida* should be more than 90 % of those from the corresponding blank compost according to ASTM E 1676. Test and evaluation criteria according to Section 5.6 of AS 5810.
- Additives present in a manufactured item at concentrations of less than 1 % of dry mass of the finished item must be harmless for the composting process.
- The total sum of the organic compounds for which biodegradability need not to be determined may not exceed 5 % of mass.
- Residues remaining in packaging or substances that may be disposed together with the product must be suitable for composting.
- According to NF T 51-800, the plastic product assessed shall not include any endocrine disruptor, any of the carcinogenic, mutagenic or toxic for reproduction (CMR) substances appearing on the candidate list of substances of very high concern for authorization, published in accordance with Article 59(10) of Regulation (EC) No. 1907/2006.

The obligation to comply with laws and regulations governing the respective products is in no way affected by this certification scheme.

## **4 Testing**

### **4.1 General information**

To carry out the inspections and tests necessary for the evaluation and certification, the certification body uses testing laboratories it has recognised in line with its accreditation according to EN ISO/IEC 17065 based on EN ISO/IEC 17025.

The certification body shall have a monitoring system in place to demonstrate competence and quality of the recognised testing laboratories in accordance with its EN ISO/IEC 17065 accreditation.

Test reports according to other certification systems could be accepted, if they meet the requirements of this certification scheme and that testing laboratory is approved by the respective certification body.

All documents must be submitted in English.

## **4.2 Types of tests**

Applicants provide the testing laboratories and the certification body with samples, as required; applicants shall bear all costs applying for sampling, transport, testing, and similar.

### **4.2.1 Initial test**

The initial test is a type test intended to establish whether the products meet the requirements according to Section 3 of this certification scheme, if applicable.

### **4.2.2 Verification test (Control test)**

All certified products undergo regular verification testing by means of IR spectroscopy, thickness/grammage, and chemical characterisation.

The certification body informs the scheme owner about upcoming verification tests.

Verification testing is performed in predefined intervals. During the term of certificate validity, the certification body alerts the scheme participants annually to when what testing is due for IR spectroscopy and thickness/grammage. The certification body sends the scheme participant a written request to supply the samples required for testing to a specified address.

This must be evidenced on schedule via a test report with positive results from a testing laboratory recognised by the certification body.

Test reports are provided by the testing laboratory to the certification body and are assessed by the certification body.

Five samples of the certified product are submitted to test for IR spectroscopy and thickness/grammage annually at a recognized testing laboratory of the respective certification body and the report is provided to this certification body.

Product samples are tested for chemical characterisation once during the period of certificate validity and the report is provided to the certification body. The results are assessed during the conformity assessment for certificate renewal.

#### 4.2.3 Additional testing

Additional testing may be required if any changes are intended for a certified product that may have an influence on conformity with the underlying requirements.

The certification body will assess if such additional testing is required.

#### 4.2.4 Process flow overview for certification

##### 4.2.4.1 Initial certification

a) For products that have not yet been tested



b) For products that have already been tested





#### 4.2.4.2 Renewal of certification



### 4.3 Test report

Test reports submitted for certification, verification and/or renewal shall be in compliance with EN ISO/IEC 17025. Additional test report requirements of the test method standards apply.

### 4.4 Application for certification

Applicants can be both scheme applicants (businesses, individuals applying for certification), or scheme participants (businesses, individuals manufacturing or distributing certified products) according to this scheme.

### 4.5 Application documents

Applicants submit the following application documents to the scheme owner and the certification body:

- Signed and completed Application Form (and Data Sheet attached)
- Safety Data Sheets/Material Safety Data Sheets according to REACH for all substances used to determine the additives' suitability for composting
- Up to date (maximum six months' old) test report (if the product has already been tested for the scope of this scheme at an approved testing laboratory)
- Test reports or certificates for materials, intermediates, or additives (if components of the product have already been tested and/or certified for the scope of this scheme)

## 4.6 Technical pre-assessment

- 4.6.1** Where an up to date test report is not available, the applicant can apply for a technical pre-assessment and obtain a full detailed quotation for testing and certification.
- 4.6.2** The certification body determines whether the product is suitable for certification and whether any tests can be omitted from the full suite of tests specified in the applicable standard.
- 4.6.3** If the applicant does not wish to apply for a technical pre-assessment, the quotation for the full certification process will itemise the full suite of tests required for compostable certification. The applicant can decide whether to proceed with testing samples of their product at one of the approved testing laboratories. Certification is only possible on the basis of positive test results. Therefore, if the applicant does not wish to apply for a technical pre-assessment or to send product samples for testing to an approved testing laboratory for the full suite of tests, it will not be possible to certify the product under this scheme.

## 4.7 Packaging units

Packaging units are distinguished in easily manually separable units and not easily manually separable units.

- Easily separable units (packaging units according to BS EN 13432).  
This refers to products like bottles with lids or yoghurt cups.

These products will be processed as a packaging unit. Both parts must independently show conformity with this certification scheme. Therefore, the calculation of potential additives will be required for each single unit. Nevertheless, the complete and un-separated packaging unit needs to meet the requirements as well.

- Not manually separable units  
This refers to products like labels on packaging. These products will be processed as one unit. Any additives contained are related to the whole unit.

#### **4.8 Definition of types, subtypes, and manufactured item families**

Products, relevant to certification are defined as types. According to the scope:

- a) Shopping bags
- b) Waste bags
- c) Food packaging
- d) Non-food packaging
- e) Films for packaging
- f) Tableware
- g) Cups
- h) Trays
- i) Food containers
- j) Straws
- k) Cutlery
- l) Coffee capsules
- m) Lids

An individual certificate will be issued for each type.

A subtype is defined as the (end) product that is different based on dimensions. Different subtypes are grouped into one product family of alternative dimensions or alternative compositions.

Multiple subtypes can be grouped onto one certificate.

### **5 Verification testing**

All certified products undergo regular verification testing by means of IR spectroscopy, maximum thickness/grammage, and chemical characterisation.

- 5.1.1** Verification testing is performed in predefined intervals. During the term of certificate validity, certification body alerts the scheme participants to when what testing is due for a product. The certification body sends the scheme participant a written request to supply the samples required for testing to a specified address.
- 5.1.2** Five samples of the certified product are tested for IR spectroscopy and thickness/grammage once a year at an approved testing laboratory and the report is provided to the certification body, which issued the respective certificate.
- 5.1.3** Product samples are tested for chemical characterisation according to Table 1 in NF T 51-800 and/or Table 1 of AS 5810, respectively, once during the period of certificate validity and the report is provided to the certification body, which issues the respective certificate. The results are assessed during the conformity assessment for certificate renewal.

These samples are taken from various production sites and marked accordingly. If more than three production sites are available, samples are submitted from alternating sites on the basis of  $\sqrt{n}$ . The number is rounded up to the next integer.

## **6 Renewal Process**

### **6.1 Application for renewal**

- 6.1.1** The certification body alerts the scheme participants right in time to when chemical characterisation is due for a product renewal and that the certificate expires. The certification body sends the scheme participant a written request to supply the samples required for testing to a specified address and alerts the scheme participant to hand in an application for renewal.
- 6.1.2** An application for renewal should be submitted sufficiently in advance prior to certificate expiry as set out by the scheme owner.
- 6.1.3** Any producer who intends to apply for renewal of certification can request an Application Form from the scheme owner or download the relevant form(s) from the scheme owner's website. The relevant application form is required to be completed with the attached data sheet.

## 6.2 Application documents

**6.2.1** Applicants submit the following renewal documents to the scheme owner and the certification body:

- Signed and completed Renewal Form (and Data Sheet attached)
- Verification test reports (IR spectroscopy, thickness/grammage and chemical characterization from an approved testing laboratory of the respective certification body which issued the respective certificate(s))

**6.2.2** The scheme owner reviews the renewal documents before supplying them to the respective certification body, which issued the respective certificate(s), for the conformity assessment.

## 7 Conformity assessment

### 7.1 Initial certification

**7.1.1** If the final product has been tested by one of its recognised testing laboratories, the certification body carries out the conformity assessment with the aid of the test report.

**7.1.2** The certification body carries out the conformity assessment against the applicable standard, according to this certification scheme document in its latest version.

**7.1.3** If the conformity assessment is successful, the certification body confirms to the scheme owner that the product conforms with the "REAL Home Compostable Products" requirements. The certification body issues the e-certificate to the producer with a product registration number.

**7.1.4** The product is registered with the product details uploaded to and published on the CMCS and certification bodies' databases and displayed on the CMCS website [www.compostablematerials.org.uk](http://www.compostablematerials.org.uk)

**7.1.5** The producer is granted the right to use the certification mark (the REAL 'Home Compostable' Mark) by the scheme owner.



**7.1.6** Validity of certificates

The certificate for products is valid for 5 years. The period of validity is shown on the certificate. On expiry of the certificate, the right to use the mark also expires.

**7.1.7** Registration numbers of products

Composition of the registration number:

**UKHCxxxx**

**7.2** **Verification testing**

**7.2.1** The certification body carries out the conformity assessment against the applicable standard(s), according to the applicable certification scheme document.

**7.2.2** If the results fulfill the necessary requirements, the certificate will remain valid and the scheme owner renews the licence agreement for use of the certification mark.

**7.2.3** If there are deviations from the spectral analyses or the maximum applicable wall thickness/grammage submitted with the application, the certification body informs the scheme owner in written form, the scheme owner informs the scheme participant and requests a written position statement. If the certification body cannot make a positive assessment on the basis of the position statement, 10 new samples are submitted for re-testing.

**7.2.4** If the assessment is not meeting the necessary requirements following the re-test, the certificate will be suspended.

Additionally, the verification test covers the following:

Check of identification of product with the respective certification mark and corresponding registration number.

### **7.3 Renewal**

**7.3.1** The certification body carries out the conformity assessment with the renewal documents, including verification test reports.

**7.3.2** If there were no deviations found during the verification tests, the certificate is renewed.

**7.3.3** If major deviations were found during verification testing, the certificate and right to use the certification mark will be withdrawn.

## **8 Appeal Process**

### **8.1 Appeal against certification bodies' decisions**

**8.1.1** Any producer that appeals a decision taken by the certification body shall follow the certification body's relevant appeal procedures.

**8.1.2** The producer makes known the reasons for the appeal and provides supporting evidence.

**8.1.3** The certification body follows its own appeal procedures and keeps the scheme owner informed of all appeals received, their subjects and outcomes.