

Standards for Compostable GreenPla Products

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Japan BioPlastics Association

Introduction

The Japan BioPlastics Association (hereafter referred to as the JBPA) will seek to determine on the basis of the standards prescribed below which GreenPla products will not hinder the production of normal compost if they are put into a composting facility with organic waste such as kitchen waste and, by permitting use of the logo prescribed by the JBPA on such GreenPla products, the JBPA will endeavor to make it easier for ordinary consumers to identify such products.

1. Standards for (Differentiation of) Compostable Products

- (1) The product shall be a GreenPla product under the JBPA's Identification System.
- (2) The compost obtained in biodegradability tests when composting the GreenPla product using the test method prescribed in 2.1 shall be sieved with a sieve that has 2mm holes, and the residue (dry weight) of the GreenPla product remaining in the top of the sieve must account for no more than 10% of the quantity (dry weight) of the GreenPla product put in.
- (3) In the reproduction inhibition tests prescribed in Section 2.2 with regard to the compost obtained in the composting biodegradability test described in (2) above, the germination rate and the growth and development quantity shall be at least 90% of that obtained using blank compost.
- (4) Exemptions:
 - 1) GreenPla products recognized as complying with these standards in a given form can be deemed to be in compliance with these standards when it is in a different form and the thickness is the same or less, or the ratio of its weight to its surface area is the same or less.
 - 2) If a GreenPla product is a container or package and is used together with its contents, those contents are unsuitable for composting, and there is a possibility that those contents will adhere to the container or package in question after use, that GreenPla product will fall outside the scope of these standards.

2. Testing Methods

2.1 Degradability Tests

- (1) Degradability tests in the process of composting GreenPla products shall be conducted using one of the following testing methods.
 - ISO 16929 "Plastics -- Determination of the degree of disintegration of plastic materials under defined composting conditions in a pilot-scale test"
(Remarks: Tests using compost vessels with a capacity of at least 140 liters)
 - ASTM D 5338 "Standard Test Method for Determining Aerobic Biodegradation of Plastic Materials under Controlled Composting Conditions"
However, the preparation of test samples shall be conducted on the basis of section 6.1 of ASTM D 6400.

(Remarks: Tests using compost vessels with a capacity of 2-5 liters)

- Tests using composting facilities on a plant scale (belonging to local authorities, etc.) that satisfy the validity conditions for ISO 16929 tests

However, in the event that the preparation of test samples is conducted in compliance with ISO 16929 and a sample net (bag) is used, a bag-style net made of non-biodegradable plastic, such as PE, with a heat resistance of at least 120°C, a mesh of 1mm, and a capacity of at least 20 liters shall be used.

- (2) The aforementioned testing methods shall be conducted according to the latest standards.

2.2 Reproduction Inhibition Tests

- (1) These shall be conducted on the basis of OECD Chemical Guideline 208. However, with regard to plant species, at least two species from two of the three categories given in OECD 208 shall be used.
- (2) Alternatively, these tests shall be conducted on the basis of “Plant Tests Using Komatsuna (*Brassica rapa* var. *pervidis*)” prescribed in General Administrative Agency Bulletin No.5005 (Silkworm Farming).
- (3) Tests shall be conducted using blank soil into which 20% or 50% (weight/weight, volume/volume, with records being kept) compost has been mixed.
- (4) Compost to which the GreenPla product (test sample) has not been added in the composting process shall be used as blank compost.

3. Display of the Logo

The display of the logo on GreenPla products deemed to conform to these standards will take place in line with the JBPA’s Standards for the Operation of the Logo.

4. Supplementary Provisions

- (1) These standards apply to GreenPla products that have been subject to composting together with organic waste products in a composting plant (*) maintained and operated at a local government facility, where the treated material has been certified as complying with the Fertilizer Law and the quality has been certified as being normal in komatsuna tests.
(*) This refers to facilities on the scale quoted in 2.1 (1) above, which are facilities managed and run by a local authority, or facilities where another body has been requested or commissioned by a local authority to take charge of the management or running, or facilities managed and run by private sector companies, and which are facilities that satisfy regulation 4. (3) below.
- (2) With regard to the display method, the label “Compostable” can be displayed below the GreenPla logo in areas where at least 50% of the local residents can use composting facilities.
- (3) Accreditation will be on the basis of an appraisal of the composting process, compost material and compost quality for each relevant GreenPla product, conducted by an expert or experienced practitioner.
- (4) If a “Compost (Quality) Standard” becomes established in Japan, these standards will be revised to correspond with it.

Additional Clauses

- (1) The facilities and assessors involved with the aforementioned accredited product shall, with the consent of the parties involved, be designated as “GreenPla Identification System Accredited Testing Facilities/Assessors” in the GreenPla Identification System Regulations, with the relevant accredited product being stipulated.
- (2) The aforementioned accreditation period shall be designated as the time until the development of testing institutions after the formulation of a JIS that corresponds to ISO 16929; thereafter, new verification by the testing institutions based on this JIS shall be necessary.
- (3) However, in the event that the facilities listed in 4. (1) above are accredited as testing institutions in relation to Additional Clause (2) above, new verification shall not be required.