

 Green Mark	Biodegradable Plastic Products	No. 84
		Category No. D-07
1. Scope This standard applies to products made from biodegradable plastics.		
2. Terms and definitions For the purpose of this standard, the following terms and definitions shall apply. Biodegradable plastics: Plastics which can be degraded through reactions initiated by natural microorganisms such as bacteria, molds, and algae.		
3. Product characteristics		
3.1 The weight of inorganic fillers in the products shall be less than 40%.		
3.2 The product’s degree of biodegradability and disintegration shall meet the regulatory limit.		
3.3 The product shall not contain non-biodegradable plastic materials.		
3.4 The product’s contents of molybdenum, selenium, fluorine, zinc, copper, nickel, cadmium, lead, mercury, chromium, and arsenic shall meet the regulatory limit.		
3.5 The product shall meet the non-toxic requirements as stipulated in the OECD No. 208 Guidelines for the Testing of Chemicals.		
3.6 The product shall not contain hazardous substances assigned the following hazard classifications by the Globally Harmonized System of Classification and Labelling of Chemicals (GHS): H300, H301, H304, H310, H311, H314, H318, H330, H331, H334, H340, H350, H360, H361, H362, H370, H372, H400, H410, H411, H412, H413, and H420. The applicant shall provide a complete list of product ingredients and associated safety data sheets (SDSs) for review. The SDSs shall contain the ingredients’ names, CAS Nos. and applicable GHS hazard classifications, as well as relevant hazards and precautionary information.		
3.7 The product and its manufacturing processes shall not use substances stipulated by the Taiwan EPA as toxic substances, and substances controlled by the Montreal Protocol.		
4. Materials, accessories and components The total weight of additives or auxiliary substances (such as binders, inks or labels) in the product shall be less than 1% of the product.		
5. Test methods and regulatory limits The regulated substances and regulatory limits for this standard are listed below. The applicable test methods shall be the national, international or specific industry standard methods, and the test reports shall be issued by accredited professional testing organizations.		
Date of Promulgation: July 21, 2004	Ministry of Environment	Date of Latest Revision: January 20, 2021

Applicable Part	Regulated Substance	Regulatory Limit	Referenced Test Method
Plastic	biodegradability	$\geq 90\%$	CNS14432-1 ISO 14855-1
Plastic	disintegration degree	$\geq 90\%$	CNS 15262 CNS 15362 CNS 14432-1 ISO 16929
Plastic	molybdenum	$< 1 \text{ mg/kg}$	US EPA 3050
Plastic	selenium	$< 0.75 \text{ mg/kg}$	US EPA 3050
Plastic	fluorine	$< 100 \text{ mg/kg}$	NIEA M402 EN 14582
Plastic	zinc	$< 150 \text{ mg/kg}$	US EPA 3051
Plastic	copper	$< 50 \text{ mg/kg}$	US EPA 3050 US EPA 3051
Plastic	nickel	$< 25 \text{ mg/kg}$	US EPA 3050 US EPA 3051
Plastic	cadmium	$< 0.5 \text{ mg/kg}$	CNS 15050 US EPA 3050 US EPA 3051 US EPA 3052
Plastic	lead	$< 50 \text{ mg/kg}$	CNS 15050 US EPA 3050 US EPA 3051 US EPA 3052
Plastic	mercury	$< 0.5 \text{ mg/kg}^*$	CNS 15050 US EPA 3050 US EPA 3051 US EPA 3052
Plastic	chromium	$< 50 \text{ mg/kg}$	US EPA 3050 US EPA 3051
Plastic	arsenic	$< 5 \text{ mg/kg}$	US EPA 3050
Plastic	Toxicity test	Non-toxic requirements in OECD No. 208 Guidelines for the Testing of Chemicals	OECD 208

*: The test report shall provide evidence that the employed test methods have detection limits of less than 1/3 of the regulatory limits.

6. Packaging

The materials of the product packaging shall meet the requirements of the *Guidelines on Review of Applications for Qualified Environmental Protection Products*.

7. Labeling

7.1 The name, address and consumer hotline of the Green Mark user shall be clearly marked on the product or its packaging.

7.2 The product or product packaging shall bear a label reading "Biodegradable Plastic".

8. Other requirements

8.1 For products with the same ingredients and proportion, but differ in shape or packaging quantity, the relevant test results of the thickest product may be referenced.

8.2 For products of different colors, if the ingredients and their proportion are the same except the difference in added masterbatch(es), if the total weight of the masterbatches are less than 1% of the product weight, there is no need to test the biodegradability, disintegration degree and non-toxicity of different color products separately.

8.3 When applying for a new Green Mark certificate, if the product ingredients and proportion remain the same as those in the original application documents, the biodegradability, disintegration degree and non-toxicity test results of the previous application may be referenced.

8.4 The sampling of the product shall be conducted by the representatives from both the Taiwan EPA registered inspection and testing organization and the product manufacturer together, at the site where the product is being sold, in a random manner; if necessary, the Taiwan EPA may also send its representative(s) to take part in the joint sampling at the product manufacturing site.

Revision History:

First revision: December 27, 2013

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