



GBT 37422-2019

Method and Criteria for Green Packaging Assessment

绿色包装评价方法与准则

State Administration for Market Regulation
Standardization Administration of the People's
Republic of China

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard was proposed by and is under the jurisdiction of the National Technical Committee 49 on Packaging of Standardization Administration of China (SAC/TC 49).

The main drafting units of this standard: National Inspection and Testing Center for Packaging Product (Ji'nan), Qingdao Yongchang Plastic & Metal Co., Ltd, SF Technology Co., Ltd., Jiangsu Caihua Packaging Group Co., Ltd., China National Export Commodities Packaging Research Institute, Nestle (China) Co., Ltd., Huangshan Novel Co., Ltd., Dongguan Huilin Packaging Co., Ltd., and Fareach Colourful Printing Industry (Huizhou) Co., Ltd.

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Method and Criteria for Green Packaging Assessment

1 Scope

This standard specifies the criteria, method, report content and format for green packaging assessment.

This standard applies to the green packaging assessment; it also applies to the compilation of various green packaging assessment specifications.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 16716 (all parts) Packaging and packaging waste

GB/T 19001 Quality management system Requirements

GB/T 20197-2006 Define, classify, marking and degradability requirement of degradable plastic

GB/T 23156 Packaging Packaging and the environmental Terminology

GB 23350 Requirements of restricting excessive package Foods and cosmetics

Catalogue for Guiding Industry Restructuring (National Development and Reform Commission)

3 Terms and Definitions

The terms and definitions as specified in GB/T 16716 and GB/T 23156 and the followings apply to this document.

3.1 Green packaging

Packaging that is less harmful to human health and ecological environment, and consumes less resources and energy in the whole life cycle of packaging products, on the premise of meeting the functional requirements of packaging.

3.2 Recoverability rate

The ratio of the mass of the part of package product that can be recovered to the total mass of the package product.

3.3 Actual recoverability rate

The ratio of actual recovery mass of package to market sales mass.

4 Assessment Criteria

4.1 General rules

4.1.1 Criteria for green packaging assessment include basic requirements and assessment indicator system requirements. The result of basic requirements is assessed by “compliance or not”; the result of assessment indicator system is assessed by the score value.

4.1.2 The basic requirements include the production enterprise requirements and the packaging product requirements. The assessment indicator system requirements include four types of primary indicators: resource attributes, energy attributes, environmental attributes and product attributes, and secondary indicators are set under the primary indicators.

4.1.3 For green packaging assessment, assessment shall be first given to the packaging according to the basic requirements of 4.2, and if the result is assessed as “compliance”, then assessment scoring shall be carried out according to the assessment indicator system requirements in 4.3 item by item.

4.2 Basic requirements

4.2.1 Production enterprises

4.2.1.1 The quality management system shall be established, implemented, maintained and continuously improved according to GB/T 19001.

4.2.1.2 The discharge of waste water and waste gas pollutants shall comply with the relevant national and local discharge standards.

4.2.1.3 Advanced technologies and process encouraged by the state shall be adopted and shall meet the requirements of the “Catalogue for Guiding Industry Restructuring”. The technology, process, equipment and related substances expressly prohibited by the industrial policy shall not be used.

4.2.2 Packaging products

4.2.2.1 Packaging products shall meet requirements of packaging purpose and basic functions, and comply with the provisions of corresponding standards.

4.2.2.2 The total content of lead, cadmium, mercury and hexavalent chromium in packaging materials shall meet the relevant requirements of GB/T 16716.1.

4.2.2.3 Packaging products shall meet the requirements of the corresponding mandatory national standards, for example, polyester (PET) beverage bottles in direct contact with food shall meet the requirements for PET products in GB 4806.7-2016.

4.3 Assessment indicator system requirements

The indicator system requirements of green packaging assessment are shown in Table 1. As regards the green packaging assessment indicator, specific packaging category shall be based for selection or addition of the applicable secondary indicators, and the corresponding reference score shall be established.

Table 1 Indicator system requirements of green packaging assessment

Primary indicators	Secondary indicators	Indicator requirements
Resource attributes	Packaging system optimization	Meet customer needs, define key items and values according to specific products
	Types of packaging materials	Single material, or two or more materials that can be easily separated
	Package layers or interspace ratio	Determined according to industry and packaging characteristics; food and cosmetic packaging should comply with the provisions of GB 23350
	Addition rate of recycled material ^a	Determined according to industry and packaging characteristics
	Actual recoverability rate	Determined according to industry and packaging characteristics
	Water intake per unit product	Determined according to industry and packaging characteristics
	Other indicators	Determined according to industry and packaging characteristics
Energy attributes	Comprehensive energy consumption	Determined according to industry and packaging characteristics
	Waste heat recovery	Determined according to industry and packaging characteristics
	Clean or renewable energy	Encourage adoption of clean or renewable energy
	Other indicators	Determined according to industry and packaging characteristics
Environmental attributes	Greenhouse gas emission	Encourage accounting of greenhouse gas emissions
	Environmental quality of production unit	Dust concentration, noise, etc., shall respectively comply with relevant standards



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