

Hong Kong Green Label Scheme

Product Environmental Criteria for

Small Home Appliances (GL-007-011)



BACKGROUND

The Hong Kong Green Label Scheme (HKGLS) is an independent and voluntary scheme, which aims to identify products that are, based on life cycle analysis consideration, more environmentally preferable than other similar products with the same function. The Scheme is organized by the Green Council (GC) with contributions from the HKGLS Advisory Committee and a number of supporting organizations.

The prime objectives of HKGLS are:

- For Consumers: to assist in making purchases of products that are less harmful to the environment;
- For Industry: to stimulate development and production of environmentally preferable alternatives.

This specification sets out the requirements that the small home appliances will be required to meet in order to be licensed to use the HKGLS label. The requirements include environmental criteria and product characteristics. The specification also defines the testing and other means to be used to verify conformance with the environmental criteria and product characteristics.

POTENTIAL ENVIRONMENTAL IMPACTS

Small home appliances (SHAs) are the most common electric consuming household products. In Hong Kong, over 80% of electricity is generated by burning coal, which is a non-renewable energy source. The combustion of coal will emit greenhouse gas (e.g. CO₂) and various kind of air pollutants such as nitrogen oxide (NO_x), sulphur dioxide (SO₂) and respirable suspended particulates (RSPs).

In the production process, plastics and metals are the major constituent parts of the SHAs. As a result, the recyclability of SHAs is a crucial factor for determining the environmental performance of the product during its product life cycle. In addition, heavy metals like lead, mercury and cadmium are commonly used in the SHA electronic components. Other environmental harmful substances such as polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) may be used as the flame retardants in the products. These heavy metals and chemicals can accumulate in the food chain and end up in and causing chronic and/or acute health impacts to the human being and the ecosystem.

During its operation, the noise emission from the SHA is another concern for health and environmental impact. At the end of its product life cycle, the worn-out SHA and its

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packaging materials, if not recycled, will increase the burden of our landfill sites through indiscriminate disposal of solid waste.

LABEL OBJECTIVE

The aim of the environmental criteria developed for small home appliances is to:

- Reduce energy consumption and promote energy-saving small home appliances;
- Reduce noise emission, and the use of the environmentally harmful substances; and
- Minimize waste production by reducing the amount of primary packaging and
- Promotion its reusability and/or recyclability.

PRODUCT DEFINITION

Small home appliances (SHA) refer to a variety of home appliances that are portable or semi-portable or used on platforms. They are intended to perform, enable or assist in performing a job or changing a status.

PRODUCT ENVIRONMENTAL CRITERIA

The table below sets out the environmental criteria for the product category of Small Home Appliances (GL-007-011) under the HKGLS.

Product Environmental Criteria	Verification Method(s)*
<p>1. The energy efficiency of the product, shall meet the following criteria:</p> <ul style="list-style-type: none"> • For product that performs its main function by motor driven mechanism, the energy efficiency shall not be lower than 70%. • For product that performs its main function by its heating elements, the energy efficiency shall not be lower than 80%. 	<p>✓ Review of laboratory test report(s); AND ✓ Review of supporting information.</p> <p>The applicant shall provide test results by in-house testing /laboratory testing or supporting documents.</p>
<p>2. Mercury, lead, cadmium, chromium VI, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) shall not be used as constituent parts of product in accordance with the Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment 2002/95/EC (commonly referred to as the Restriction of Hazardous Substances Directive or RoHS).¹</p>	<p>✓ Review of laboratory test report(s); AND ✓ Review of supporting information.</p>

¹ Exemption on the use of these substances may be granted. Please refer to EU Directive 2002/95/EC for details.

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Product Environmental Criteria	Verification Method(s)*
3. The product shall not contain asbestos (white, brown or blue asbestos).	<ul style="list-style-type: none"> ✓ Review of supporting information; AND ✓ Interview with relevant personnel. <p>The applicant shall declare compliance with supporting documents.</p>
4. The noise level of the product shall not be greater than 80 dB.	<ul style="list-style-type: none"> ✓ Review of laboratory test report(s); AND ✓ Review of supporting information.
5. The disassembly of the product shall be simple with regular tools (e.g. screwdriver).	<ul style="list-style-type: none"> ✓ Review of supporting information; AND ✓ Interview with relevant personnel. <p>The applicant shall declare compliance with supporting documents.</p>
6. The built-in battery of the product (if applicable), shall be of the rechargeable type and replaceable by the consumers easily. The mercury, cadmium and lead content shall meet the requirement in accordance to EU Directive 2006/66/EC.	<ul style="list-style-type: none"> ✓ Review of laboratory test report(s); AND ✓ Review of supporting information.
7. The coating material used on the product shall not contain mercury or mixed with any dyes containing lead, cadmium, hexavalent chromium.	<ul style="list-style-type: none"> ✓ Review of laboratory test report(s); AND ✓ Review of supporting information.
8. An instruction manual(s) shall accompany the product concerning its construction, use, disassembling, and preferably also disposal and recycling.	<ul style="list-style-type: none"> ✓ Inspection of product samples; AND ✓ Review of supporting information. <p>Manual(s) shall be submitted for review.</p>
9. General packaging requirement (Refer to criteria for packaging materials: GL-Packaging).	<ul style="list-style-type: none"> ✓ Inspection of product samples; AND ✓ Review of supporting information; AND ✓ Interview with relevant personnel.

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*Analytical testing should be accredited and performed by laboratories that meet the requirement laid out in the IEC/ISO 17025 or EN45001 standards or any equivalent systems e.g. HOKLAS, CNAS. Under special situation and with the approval from GC, test can be performed by in-house method by the accredited laboratory or manufacturer.