

Hong Kong Green Label Scheme

Product Environmental Criteria for

Rechargeable Battery (GL-005-001)



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

This specification sets out the requirements that rechargeable battery 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

The environmental impact of rechargeable battery is associated with its scrapping after use. Neither landfill dumping nor incineration is desirable disposal methods for battery waste. Heavy metal contents particularly cadmium is harmful to kidney function of human.

LABEL OBJECTIVE

The aim of the environmental criteria developed for rechargeable battery is to:

- Reduce the consumption of resources with the use of batteries.
- Reduce the input of heavy metals such as cadmium into the environment.

PRODUCT DEFINITION

This document and all product environmental criteria therein apply to single sealed rechargeable battery or battery pack containing multiple rechargeable batteries, and include (but not limited to) lithium and nickel-hydrate batteries. Environmentally harmful nickel cadmium (NiCd) batteries are excluded.

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PRODUCT ENVIRONMENTAL CRITERIA

The table below sets out the environmental criteria for the product category of Rechargeable Battery (GL-005-001) under the HKGLS.

Product Environmental Criteria	Verification Method(s)*
1. Cadmium and mercury content in concentrations occur in battery shall be less than 5 ppm each, and lead only in content below 15 ppm.	✓ Review of laboratory test report(s) ¹
2. The product shall be capable of delivering 80% of its original capacity after 400 discharge/charge cycles.	✓ Review of laboratory test report(s) ²
3. The battery shall include the following information to the consumer: <ul style="list-style-type: none"> • Battery capacity • Number of times the battery can be recharged • Safety and maintenance instructions 	✓ Review of supporting information.
4. Packaging requirements : <ul style="list-style-type: none"> • Packaging material shall not contain chlorine-based plastics; • General packaging requirement (Refer to criteria for packaging materials : GL-Packaging). 	✓ Inspection of product samples; AND ✓ Review of supporting information; AND ✓ Interview with relevant personnel.

*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.

Note:

1. The metal content is analysed in accordance with “Battery Industry Standard Analytical Method. For the determination of Mercury, Cadmium and Lead in Alkaline Manganese Cells Using AAS, ICP-AES and Cold Vapour, European Portable Battery association (EPBA), Battery Association of Japan (BAJ), National Electrical Manufactures Association (NEMA; USA) April 1998”.
2. The testing can refer to clause 7.2.2, 7.2.3 and 7.2.4 *Nordic Ecolabelling: Rechargeable batteries 030/3.2*