

# Hong Kong Green Label Scheme

## Product Environmental Criteria for Detergents for Dishwashers (GL-007-004)



### 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 dishwashers 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

Energy consumption is the key environmental impact for dishwashers in product use stage. Other environmental impacts include noise emissions, the use of detergents in product use, and if hot water is used, the energy consumption for the production hot water. The worn-out dishwasher and the packaging materials of dishwashers burden our environment through the generation of solid waste. The consumption of water is also an environmental loading in countries or areas where there is a shortage of water.

### LABEL OBJECTIVE

The aim of the environmental criteria developed for dishwashers is to:

- Reduce energy consumption and promote energy-saving dishwashers;
- Reduce water consumption and promote water-saving dishwashers;
- Reduce noise emission and the use of the environmentally harmful substances;
- Reduce detergent consumption;
- Minimize waste production by reducing the amount of primary packaging and promoting its reusability and/or recyclability.

### PRODUCT DEFINITION

This document and all product environmental criteria therein apply to domestic dishwashers who are either floor-mounted or worktop models and is intended for use either freestanding or built in.

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Testing of dishwashers shall be carried out with the number of place settings specified by the manufacturer, and with the dishwasher connected to the cold water supply. Dishwashers are also tested at half load.

The environmental criteria focus on the dishwasher system itself. Criteria for dishwashing detergents are referred to GL-003-003.

**PRODUCT ENVIRONMENTAL CRITERIA**

The table below sets out the product environmental criteria for dishwashers (GL-007-004) under the HKGLS.

| Criteria   | Verification Method |
|--|---------------------|
| 1. Energy Efficiency Index, EEI (%): <ul style="list-style-type: none"><li>• Dishwasher with 10 or more place settings: lower than 0.76.</li><li>• Dishwasher with less than 10 place settings: lower than 0.88.</li></ul>   | A (EN 50242), C     |
| 2. Water consumption of not more than 25 litres per normal cycle   | C,D                 |
| 3. Noise Emission:<br>Airborne noise emission from the appliance, measured as sound power level, shall not exceed 57 dB (A) on freestanding models and 51 dB (A) on built-in models.   | A (EN-60704), C     |
| 4. Plastic Parts:<br>Substances based on cadmium, lead, mercury or their compounds, or the following flame-retardant shall not be added to the plastic materials: <ul style="list-style-type: none"><li>• Polybrominated biphenyls (PBB); and</li><li>• Polybrominated diphenyl ethers (PBDE).</li></ul> | C,D                 |
| 5. Surface Treatment:<br>Paints shall not contain pigments or additives based on cadmium, lead, chromium, mercury or their compounds. Metals shall not be coated with cadmium, chromium, nickel or their compounds.  | A,C                 |
| 6. The product shall have clear volumetric markings on the detergent dispenser to allow adjustment according to degree of soiling.   | B,C                 |
| 7. Packing requirements : <ul style="list-style-type: none"><li>• Packaging materials shall not contain chlorine-based plastics;</li><li>• General packaging requirements (refer to criteria for packaging materials: GL-Packaging).</li></ul>   | B,C,D               |

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**Legend :**

A – Analytical testing shall be performed by laboratories that meet the requirement laid out in the EN45001 standards or any equivalent systems (e.g. HOKLAS, IEC/ISO 17025).

B - Inspection of product samples

C – Review of supporting information as required by the GC

D – Interviews with relevant personnel and/or site visits to relevant facilities