

Hong Kong Green Label Scheme
Product Environmental Criteria for
All Purpose Cleaner (GL-003-005)



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 “all purpose cleaner” products will be required to meet in order to be licensed to use the HKGLS label. The requirements include environmental criteria and related product characteristics. The specification also defines the testing and other means to be used to verify conformance with the requirements.

POTENTIAL ENVIRONMENTAL IMPACTS

All-purpose cleaners are widely used in domestic premises of Hong Kong every day for the routine cleaning of floors, walls, ceilings and other fixed surfaces. These cleaners contain various chemical ingredients such as surfactants (surface active agents) that perform the main cleaning function, also water softeners, bleaches (whiten, disinfect, deodorize and remove stains), preservatives, dyes and any other Volatile Organic Compounds (VOCs).

Cleaning products are released to the environment during normal use through evaporation of volatile components and rinsing down the drain of residual product from cleaned surfaces, sponges, etc. The discharge of the cleaners and/or their prepared solution presents a significant burden on our environment in terms of wastewater loading, air pollution and subsequent treatment, resource consumption and disposal of packaging materials. Phosphorus or nitrogen in the ingredients may contribute to nutrient loading in water bodies, leading to adverse effects on water quality.

Certain ingredients in cleaning products can present hazard concerns to exposed populations, e.g. skin and eye irritation in workers, or toxicity to aquatic species in waters receiving inadequately treated wastes.

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LABEL OBJECTIVE

The aim of the environmental criteria developed for “all purpose cleaners” is to:

- Reduce the toxicity of wastewater arising from the use of all purpose cleaners, and to help reduce the environmental loading of sewage treatment facilities and the receiving water bodies;
- Reduce the release of toxic gaseous emissions arising from the use of “all purpose cleaners”; and
- Minimize waste production by reducing the amount of primary packaging.

PRODUCT DEFINITION

This document and all product environmental criteria therein apply to all “all purpose cleaners” in powdered, liquid or other forms.

PRODUCT CRITERIA

The product performance and environmental criteria for the product category of “all purpose cleaners” (GL-003-005) under the Hong Kong Green Label Scheme (HKGLS) are set out in this criteria document in the ensuing table.

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Criteria



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| 1. The detergent shall be easily biodegradable. | A or C |
| 2. The detergent shall not contain the following substances: <ul style="list-style-type: none">• Non – biodegradable complexing agents such as ethylenediamine tetraacetic acid (EDTA)• APEO (alkyl phenol ethoxylate); and• Chlorine bleaching agents. | A or C |
| 3. The detergent shall contain the following substances in a limited level: <ul style="list-style-type: none">• NTA (nitrilo-tri-acetate) shall not exceed 0.01g/litre;• Phosphate shall not exceed 0.5%;• Phosphonates shall not exceed 0.4%. | A or C |
| 4. Quaternary ammonium salts that are not readily biodegradable shall not be used. | C |
| 5. The product shall not contain more than 10% (by weight) of volatile organic compounds with a boiling point lower than 150°C. | A or C |
| 6. Colour Pigments: only food and cosmetics shall be used. | A or C |
| 7. Packaging Requirements: <ul style="list-style-type: none">• Maximum packaging limit: 18g per 100g of product in use.• General packaging requirements:<ul style="list-style-type: none">◦ Packaging materials shall not contain chlorine-based plastics.◦ The plastics shall preferably carry a plastic resin identification code (optional). | B,C,D |

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

Council Directive 76/768/EEC of 27 July 1976 on the approximation of the laws of the Member States relating to cosmetic products Annex IV – Part 1 List of colouring agents allowed for use in cosmetic products (See Resources Centre at <http://www.greencouncil.org/eng/greenlabel/res.asp>).

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Council Directive 94/36/EEC of 30 June 1994 on colors for use in foodstuffs (refer to Annex 1) (See Resources Centre at <http://www.greencouncil.org/eng/greenlabel/res.asp>).

Notes on Verification Method

1a Appropriate *test* results, showing that the surfactants used are aerobically biodegradable shall be provided.

1b Ingredients will be considered readily biodegradable if the level of biodegradability measured is at least 60% within 28 days.

1c The EC Detergent Ingredient Database (DID) list (See Resources Centre at <http://www.greencouncil.org/eng/greenlabel/res.asp>) can be referred to.

2 The applicant shall provide documentation to confirm that the listed substances have not been included in the product.

3 The formulation of the product shall be provided together with the details of the constituent substances.

4 The applicant shall provide documentation showing the biodegradability of any quaternary ammonium salt used.

5 The formulation of the product shall be provided with a declaration of compliance with this criterion.

6 A declaration of compliance with this criterion shall be provided together with a list of all dyes or colouring agents used.

7 A description of the materials used in packaging and labels and an empty package shall be provided, together with a declaration that the packaging materials do not contain chlorine-based plastics.