

Environmental Choice^M Program

CERTIFICATION CRITERIA DOCUMENT

CCD-073-a



Product: Combustible Gel Products

Preamble

Environment Canada's Environmental Choice^M Program is pleased to publish the following national guideline on **combustible gel products** under the auspices of the Environmental Choice^M Program.

The Environmental Choice Program is designed to support a continuing effort to improve and/or maintain environmental quality by reducing energy and materials consumption and by minimizing the impacts of pollution generated by the production, use and disposal of goods and services available to Canadians.

A number of products are available in the marketplace which provide flames for utilitarian and aesthetic purposes. These include chafing that maintain cooked food at a palatable temperature, starting fluids that are used with camp fires and bar-b-ques, and devices that provide flames to accompany simulated firewood in specialty fireplaces. In all cases, the flame is produced from a suitable combustible medium that must be able to provide a flame with qualities appropriate to the designated task. Furthermore, the product must be able to delivery the flame within appropriate safety parameters.

While several distinct media have been developed for various flame-producing purposes, some are derived from non-renewable sources, and/or may produce air emissions that may be toxic or are otherwise harmful to the immediate environment.

Based on a review of currently available life cycle information, the product category requirements will produce an environmental benefit through the use of renewable resources and reduction of harmful emissions.

Life cycle review is an ongoing process. As information and technology change, product category requirements will be reviewed and possibly amended.

The Minister of the Environment anticipates that manufacturers or importers of **combustible gel products**, which conform to this guideline will apply to the Environmental Choice Program for verification and subsequent authority to label the qualifying products with the Environmental Choice EcoLogo.

Notice

Throughout this document, any reference to a standard or guideline means to its latest edition.

The Environmental Choice^M Program (ECP) reserves the right to accept equivalent test data for the test methods specified in this document.

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Interpretation

1. In this set of requirements, please note the following definitions:

“**fire-ignition fluid**” means a fluid designed to ignite camping/cooking fires and/or the principal fuel (e.g., charcoal briquettes) in bar-b-ques or like devices;

“**simulated fireplace gel**” means a contained gelatinous substance which, in combination with simulated (e.g., porcelain) firewood, creates an aesthetically pleasing flame in fireplaces manufactured for, or adapted to, wood-free fires;

“**Test Method**” means a scientific procedure in which the performance of a product(s) is measured under specific conditions to yield reproducible results. An outline is provided in Appendix A; and

“**warming / cooking gel**” means a contained gelatinous substance, which produces a flame for the purpose of maintaining cooked food at a desirable temperature.

Category Definition

2. This category includes all **combustible gel products** as further defined in the sub-categories in this section. The sub-categories are:

- (a) warming / cooking gels;
- (b) fire-ignition fluid; and
- (c) simulated fireplace gels.

Note: Other sub-categories may be added at a later date.

General Requirements

3. To be authorized to carry the EcoLogo^M, the **combustible gel product** must:

- (a) meet or exceed all applicable governmental and industrial safety and performance standards; and
- (b) be manufactured and transported in such a manner that all steps of the process, including the disposal of waste products arising therefrom, will meet the requirements of all applicable governmental acts, by laws and regulations including, for facilities located in Canada, the *Fisheries Act* and the *Canadian Environmental Protection Act (CEPA)*.

Product Specific Requirements

4. To be authorized to carry the EcoLogo^M, the **warming / cooking gel** must:
 - (a) be composed of no less than 70% ethyl alcohol (ethanol);
 - (b) contain no petroleum distillates;
 - (c) maintain test food samples at a temperature of at least 80^o C when tested by an independent third party laboratory as per the Test Method in Appendix A; and
 - (d) last for a minimum of 4 hours or up to twice as long as competing products when tested by an independent third party laboratory as per the Test Method in Appendix A.

5. To be authorized to carry the EcoLogo^M, the **fire-ignition fluid** must:
 - (a) be composed of no less than 70% ethyl alcohol (ethanol);
 - (b) contain no petroleum distillates;
 - (c) burn at a temperature of at least 180^o C, as measured by **ASTM D-92-02a: Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester** or ASTM D-93: **Standard Test Method for Flash-Point by Pensky-Martens Closed Cup Tester**; and
 - (d) perform as well as other non-ethanol-based fluids (i.e. last for a period of time long enough to sufficiently and safely ignite the main fuel) when tested by an independent third party laboratory as per an acceptable test method.

6. To be authorized to carry the EcoLogo^M, the **simulated fireplace gel** must:
 - (a) be composed of no less than 70% ethyl alcohol (ethanol);
 - (b) contain no petroleum distillates;
 - (c) burn at a temperature of at least 150^o C, as measured by **ASTM D-92-02a: Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester** or ASTM D-93: **Standard Test Method for Flash-Point by Pensky-Martens Closed Cup Tester**;
 - (d) last for a minimum of 3 hours when tested by an independent third party laboratory as per an acceptable test method..

Verification

7. To verify a claim that a product meets the criteria listed in this document, the ECP will require access, as is its normal practice, to relevant quality control and production records and the right of

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access to production facilities on an announced basis.

8. Compliance with requirement 3(b) shall be attested to by a signed statement of the Chief Executive Officer or the equivalent officer of the licensee. The ECP shall be advised in writing immediately by the licensee of any noncompliance, which may occur during the term of the license. On the occurrence of any noncompliance, the license may be suspended or terminated as stipulated in the license agreement.

Conditions for EcoLogo Use

9. The EcoLogo may appear on wholesale or retail packaging, or on the product itself, provided that the product meets the requirements in this guideline.
10. It is recommended that a criteria statement appear with the EcoLogo whenever the EcoLogo is used in association with the **combustible gel product**. The intent of this statement is to provide clarification as to why the product was certified and to indicate constraints to which the certification is limited. This is to ensure no ambiguity over, or misrepresentation of, the reason(s) for certification.

The criteria statement must be specific to the product's sub-category. For sub-category 2(a), the required criteria statement is "Warming/Cooking Gel"; for sub-category 2(b), the required criteria statement is "Fire-Ignition Fluid"; and for sub-category 2(c), the required criteria statement is "Simulated Fireplace Gel". The licensee may propose other wording for the criteria statement, but any such proposed wording must be approved by the Environmental Choice Program.

11. All licensees and authorized users must comply with the Environmental Choice Program's Guide to Proper Use of the EcoLogo^M regarding the format and usage of the EcoLogo.
12. Any accompanying advertising must conform with the relevant requirements stipulated in this guideline, the license agreement and the Environmental Choice Program's Guide to Proper Use of the EcoLogo^M.

***For additional copies of this guideline or for more information about the Environmental Choice Program, please contact: TerraChoice Environmental Services Inc.,
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Appendix A Combustible Gel Burn Time and Burn Temperature Test

- ! Testing to be performed by a third party accredited laboratory.
- ! Sample size: one package approximately 230 ml in size.
- ! Control conditions: 22 degrees Celsius, 35% relative humidity indoors.
- ! Test apparatus:
 - ▶ Water tray/chafing dish: lower pan, 3 litres of distilled water in a 4-litre 10-gage type A36 mild steel pan.
 - ▶ Food dish: upper pan; 2 litres of distilled water in a 4-litre 10-gage type A36 mild steel pan.
 - ▶ Gel flame distance from the bottom of the steel pan: 5cm.
 - ▶ Gel flow rate: 0.5 cubic feet per minute
- ! Time to be measured from lighting of gel
- ! Temperature to be measured continuously through out testing.