

Eco Mark Product Category No. 160

“Biodiesel Fuels Made of Used Cooking Oil Version1.0”

Certification Criteria

- Applicable Scope-

Fuels for diesel engines (for automobiles, for construction machines, for generators, etc.) made using “used cooking oil-derived Fatty acid methyl esters”.

Established: August 1, 2017

Japan Environment Association

Expiration date: July 31, 2024

Eco Mark Office

NOTE: This document is a translation of the criteria written in Japanese. In the event of dispute, the original document should be taken as authoritative.

Eco Mark Product Category No.160

“Biodiesel Fuels Made of Used Cooking Oil Version 1.0” Certification Criteria

Japan Environment Association
Eco Mark Office

1. Purpose of Establishing Criteria

Omitted.

2. Applicable Scope

Fuels for diesel engines (for automobiles, for construction machines, for generators, etc.) made using “used cooking oil-derived Fatty acid methyl esters”.

3. Terminology

Waste edible oil	Cooking oil discharged since it has gone out of use as food, due to the reasons of discharged during the cooking process and the food manufacturing process, or expired freshness date, etc.
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4. Certification Criteria and Certification Procedure

To show conformance to the individual criteria item, the respective Attached Certificates shall be submitted.

4-1. Environmental Criteria and Certification Procedure

4-1-1 Resource Saving and Resource Recycling

(1) Raw material fat of Fatty acid methyl esters to be used for the application fuel shall be “used cooking oil”. Also, the used cooking oil is collected in compliance with the relevant laws and regulations.

[Certification Procedure]

Names of suppliers (collectors) of the used cooking oils to be used for the application fuels up to the top five companies of largest supply volume shall be stated in the Attached Certificates. Further, the raw material certificate issued by the used cooking oil supplier (collector) shall be submitted. The raw material certificate attests the waste generating place, waste generating process of the used cooking oil, and the fact that, in the collection, the related laws and regulations

such as “Waste Disposal and Public Cleansing Law” (Waste Management Law) are confirmed and the relevant laws and regulations are complied with.

- (2) The application fuel shall be used without blending Fatty acid methyl esters with other fuel (light oil, etc.), or blended with light oil to meet a blending ratio (upper limit of 5% by mass) of Fatty acid methyl esters specified in the “Act on the Quality Control of Gasoline and Other Fuels” (The Quality Assurance Law). Alternatively, the application fuel has received the certification of special measures on the Law.

[Certification Procedure]

A manufacturing process flow diagram (stating the overview of the manufacturing process and the name of responsible business operator, with photos of main manufacturing equipment attached) of the application fuel shall be submitted. Further, a raw material certificate issued by a manufacturer, stating a blending percentage of Fatty acid methyl esters to light oil, other raw materials, and a mass percentage of the used cooking oil contained in raw material fat, shall be submitted. When the application fuel has received the certification of special measures of the “Act on the Quality Control of Gasoline and Other Fuels” (The Quality Assurance Law), the certificate thereof shall be submitted.

- (3) In the case where the applicant manufactures or sells the application fuel, the applicant shall provide a user with information about precautions (expiration date for use of fuels, the necessity for inspection and maintenance when using fuels) for the proper handling of fuels, and the proper disposal method of fuels left unused. Further, the applicant, when using the application fuel, shall properly handle the fuel in accordance with the precautions for the handling of fuels, and shall properly dispose the fuel left unused.

[Certification Procedure]

When the applicant manufactures or sells the application fuel, the copies of the parts where the information about precautions for the proper handling of fuels, and the proper disposal method of fuels left unused are stated, shall be submitted. Also, a method of providing the information shall be stated in the Attached Certificate. When the applicant uses the application fuel, intended purpose of the fuel, proper handling, and proper disposal of the fuel left unused shall be stated in the Attached Certificate.

- (4) The used cooking oils that were not successfully used for the application fuel, among the used cooking oils which have been accepted as raw material of the application fuel, shall be utilized for other purposes.

[Certification Procedure]

A certificate issued by a manufacturer, in which annual generation volume (rough estimate) of the used cooking oils which were not successfully used as the application fuel, among the used cooking oils which have been accepted as raw material of the application fuel, their purposes of usage, utilization method, and treatment process are stated, shall be submitted.

4-1-2 Restriction and control of hazardous substances

(5) In manufacturing the applied product, related environmental laws and regulations and pollution control agreement (hereinafter referred to as the “Environmental Laws, etc.”) must be followed with respect to air pollution, water contamination, noise, offensive odor, and emission of hazardous substances in the area where the plant performing the final manufacturing process is located.

In addition, the state of compliance with the Environmental Laws, etc. for the past five years from the date of application (whether there is any violation) must be reported. If there is any violation, proper remedies and preventive measures shall have been already taken, and the related Environmental Laws, etc. must thereafter be followed appropriately.

[Certification Procedure]

With respect to the compliance with the Environmental Laws, etc. in the area where the plant performing the final manufacturing process is located, a certificate issued by the representative of the business of manufacturing the applied product or the relevant plant manager (entry or attachment of a list of names of the Environmental Laws, etc.) must be submitted.

In addition, the applicants shall report whether there is any violation in the past five years, including a violation subject to administrative punishment or administrative guidance, and if there is, the following documents in a and b must be submitted:

- a. With respect to the fact of violation, guidance documents from administrative agencies (including order of correction and warning) and copies of written answers (including those reporting causes and results of correction) to such documents (clearly indicating a series of communication);
- b. Following materials (copies of recording documents, etc.) concerning the management system for compliance with the Environmental Laws, etc. in 1)-5):
 - 1) List of the Environmental Laws, etc. related to the area where the plant is located;
 - 2) Implementation system (organizational chart with roles, etc.);
 - 3) Bylaws stipulating retention of recording documents;

- 4) Recurrence prevention measures (future preventive measures);
 5) State of implementation based on recurrence prevention measures (result of checking of the state of compliance, including the result of onsite inspection).

- (6) Waste liquid, wastewater, wastes generated during the manufacturing process of Fatty acid methyl esters to be used for the application fuel are properly disposed in compliance with the related laws and regulations.

[Certification Procedure]

A certificate issued by a Fatty acid methyl esters manufacturer, containing the contents of, and disposal method of waste liquid, waste water, wastes generated during the manufacturing process of Fatty acid methyl esters to be used for the application fuel, and laws and regulations related to disposal, shall be submitted.

4-2. Quality Criteria and Certification Procedure

- (7) Fuels to be used without blending Fatty acid methyl esters with other fuels (light oils, etc.) shall be analyzed two or more times per year (one time during winter season from December to February, and one time after an interval of more than four months from the previous analysis), in accordance with the monitoring standards specified in the “Guideline Concerning Manufacture and Utilization of Biodiesel Fuels” by the Council for Nationwide Promotion of Utilization of Biodiesel Fuels, and their conformance to the monitoring standards shall be confirmed; provided however, in the case where a fuel manufacturer use them by itself and has independent quality standard, their conformance to said quality standards may be also acceptable.

Fuels composed of a blend of Fatty acid methyl esters and light oils shall conform to the mandatory standards of light oils specified in the “Act on the Quality Control of Gasoline and Other Fuels” (The Quality Assurance Law). The fuel manufacturer, when intending to consume or distribute said fuels as a fuel for automobiles, shall have performed registration of specified processors of light oil specified in the Law and quality verification. When receiving the certification of special measures on the Law, the fuel manufacturer shall have performed the specified quality verification.

[Certification Procedure]

Fuels to be used without blending Fatty acid methyl esters with other fuels (light oils, etc.) will be analyzed two or more times per year stipulated by the criteria within one year from the application date, in accordance with the monitoring standards specified in the “Guideline Concerning Manufacture and Utilization of Biodiesel Fuels” by the Council for Nationwide Promotion of Utilization of Biodiesel, and the copies of the analysis results shall be submitted. Further, even

after the certification, the results of analyses performed two or more times every year stipulated by the criteria shall be submitted. In the case where a fuel manufacturer use them by itself and has independent quality standards, contents of the quality standards and a certificate attesting the conformance thereto shall be submitted.

For fuels composed of a blend of Fatty acid methyl esters and light oils, a certificate attesting that the fuels conform to the mandatory standards of light oils specified in the “Act on the Quality Control of Gasoline and Other Fuels” (The Quality Assurance Law) shall be submitted. When the fuel manufacturer intends to distribute or consume said fuels as a fuel for automobiles, the copies of Notice of Shelf Registration of Business Operators of Specified Processors of Light Oils, and quality analysis results (for one time) performed within one year from the application date may be submitted. In cases where the fuel manufacturer has received the certification of special measures on the Law, a certificate attesting that the prescribed quality verification is performed shall be submitted.

5. Considerations

In the process of manufacturing, it is desirable to consider the following, although they are not requirements for certification. The conformance to the individual criteria item shall be indicated on in Attached Certificates. (Only for applicants of fuel manufacturer)

- (1) The improvement of the efficiency of transportation and delivery during the collection of used cooking oil is achieved.
- (2) Glycerin waste liquid generated during the manufacturing process is effectively utilized including material recycling as product glycerin, utilization as fuel at incineration facilities or boilers and utilization as fermentation accelerators at methane fermentation facilities or composting facilities, etc.
- (3) When washing waste water containing oil content during the refining process of fuels is generated, it is burnt together with glycerin waste liquid by the incineration facilities, or is utilized as dilution water in the methane fermentation.

6. Application unit, Indication and Others

- (1) Product classification (application unit) to be performed for each of fuels whose quality standard values (quality standard items and standard values which apply to 4-2.(7)) of the application fuels are identical with each other. If the quality standard values are

identical, fuels with different volumes, packing styles, etc. may be applied collectively.

- (2) In principle, Eco-Mark shall be indicated on the container of fuel. B type or C type display shall be conducted in accordance with the "Guide to Eco Mark Usage" (<https://www.ecomark.jp/office/guideline/guide/>). In addition, the display position and contents shall be submitted when applying for Eco Mark certification and its use.

[Sample]

B type display	Condition of indication
<div style="display: flex; align-items: center;">  <div style="border-left: 1px solid black; padding-left: 10px;"> <p>エコマーク … 1) 廃食用油からの燃料○% …2) 12345678 (または○○○株式会社) …3)</p> </div> </div> <p>A blending ratio (mass%) of used cooking oil-derived fuel shall be stated in ○% of (2) “Used Cooking Oil” may be replaced with a wording such as “Tempura Oil No Longer Used”.</p>	<p>1-2(1) “Certification information” of “Guide to Eco Mark Usage” shall include (1)-(3) below.</p> <ol style="list-style-type: none"> 1) The wording of "Eco Mark" or any expression of Eco Mark products stipulated in Section 1-6 in the "Guide to Eco Mark Usage" 2) The wording indication of environmental information 3) The Eco Mark certification number or the name of the Eco Mark Usage Licensee (The indication of the both is acceptable)
C type display	Condition of indication
<div style="text-align: center;">  <p>エコマーク認定燃料 12345678</p> </div>	<p>This is a sample. Conduct a proper indication by referring samples in 1-3 of the "Guide to Eco Mark Usage".</p> <p>Please make an Eco Mark product information page on the website which includes the certification information in order for customers to refer the certification information,</p>

- (3) In cases where the third party other than the Eco Mark Usage Licensee uses the fuel certified based on the Product Category, and intends to indicate the Eco Mark on vehicles, equipment, signboards, advertising articles, etc. which have used the concerned fuel, the third party shall perform usage application of “Eco Mark product user logo”. Besides, the third party shall pledge “to properly handle the fuels in accordance with the precautions relating to handling of fuels, and to properly dispose the fuels left unused” of the criteria set forth in 4-1-1(3).

August 1, 2017:	Established
July 31, 2024 :	Expiration date

The Certification Criteria for the Product Category will be revised when necessary.