

MILIEUKEUR CERTIFICATION SCHEME FIRE EXTINGUISHERS

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SMK publishes the Milieukeur certification schemes and holds the right to make 'additional provisions' before the present version of the scheme expires and an up-dated version comes into effect. The scheme in force and possible additional provisions are published on-line at www.smk.nl.

The trademark 'Milieukeur' and logo are registered at the Benelux Office for Intellectual Property (ref.nr. 0516647) and is protected legally. Proceedings for trademark infringement can be commenced to prevent unauthorized use of the trademark.

This document is a translation of the Milieukeur scheme 'Brandblusmiddelen'; the official Dutch text prevails in cases of disagreement and indistinctness.



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Introduction

All Milieukeur certification schemes are designed and administered by SMK (Stichting Milieukeur). The certification for Milieukeur is carried out by independent certification bodies (CBs), with which SMK has signed a licensing agreement. Milieukeur certification schemes are accepted by the Dutch Accreditation Council (RvA), which checks SMK and the CBs (and also specifically the Milieukeur certification scheme for fire extinguishers). The certification scheme describes which requirements the product of an applicant (or certificate holder) must meet, and what needs to be inspected and assessed by the CBs. Additionally, this document mentions a few specific requirements to the certification procedure (these apply together with the general requirements imposed by SMK and the RvA; see Section 3.1).

The certification scheme is designed in such a way that companies (that want to obtain or retain the Milieukeur certificate), or other interested parties, can easily study, if a certain product complies with the requirements.

Chapter 1 deals with the scope of the product group. The Milieukeur certification scheme Fire Extinguishers includes:

- Portable and wheeled fire extinguishers: CO₂, water with additives, and foam extinguishers;
- Extinguishing foams, water and chemical additives and inert gases, including CO₂, for fire fighting installations.

A product can only be certified if it is within the product group scope. Powder and disposable fire extinguishers cannot be certified, because of their impact on the environment. Till now, the same is true for aerosol fire extinguishers.

The requirements which the product and the ingredients shall meet are mentioned in Section 2. The Milieukeur requirements for fire extinguishers include environmental requirements (Section 2.1), requirements to the functionality of fire extinguishing agents (Section 2.2) and requirements for external communication by the manufacturer (Section 2.3). For applicants and certified companies these requirements are most important. Each criterion mentions the subject (this is sometimes expressed as a goal), the requirement, and the method to comply. For several criteria the proof shall be collected in a 'technical file', the content of a 'technical file' is described in Section 3.2.

Milieukeur criteria, only in extra-ordinary cases, e.g. considering product safety, refer to legislation and regulations. It is a requirement for certification that a company complies with (inter-) national and regional laws and regulations.

Chapter 3 mentions requirements to the certification procedure. For applying and certified companies are of interest the inspection method (Section 3.2) and the evaluation method (paragraph 3.3) of the CB.

Questions about the application and certification process can best be addressed to one of the CBs. Information on the CBs is published on www.smk.nl. The certification costs consist of an application fee, the costs of the CB, and a fee to SMK for using the label (the rates of SMK can be found on the website).

1. The scope of the product group 'Fire Extinguishers'

Included products

- Portable and wheeled fire extinguishing equipment: CO2 extinguishers, water with additives, and extinguishing foams (water with foam additives);
- Fire extinguishing foams (water with foam additives), water with additives and fire extinguishing gases (inert en chemical gasses, incl. CO2), which are used as solutions or agents in fire fighting installations.

Excluded products

At present, aerosol fire extinguishers are in development, but do not qualify for a Milieukeur certificate yet. The Board of Experts will consider the possibility of certification of aerosols, as soon as this type of fire fighting agents complies with the present criteria on fire extinguishers, and a market party applies for certification.

Powder extinguishers a priori do not qualify for a Milieukeur certificate, because of the large amount of solid waste they bring about (if used or recycled) and the amount of additional damage they can inflict.

Fire extinguishing products (in specific spray cans) that cannot be disposed of in an environmentally friendly manner (and which content is not recycled) do not comply with the Milieukeur certification scheme.

Products with cartridges

The requirements in this scheme apply for the ready-for-use product. If a fire extinguisher consists of one or more cartridges, the criteria apply to the total content of all the cartridges (using the standard amount of water in the cartridges; as applied during the functionality tests).

2. Milieukeur product criteria

2.1 Environmental criteria

Aspect	Requirements to the product	Method	Level ^{a)}
2.1.1 Product and no hazard to health	The product shall not be classified as: <ul style="list-style-type: none"> - caustic/corrosive (C); - toxic (T); - very toxic (T+); - harmful (X_n); - causing sensitization (Xi in combination with R33, R42, R43, or R64); conform EC Directive 1999/45/EC and amendments.	Technical file (suppliers' documentation and MSDS assessment) ^{b)}	Major
Aspect	Requirements to the product	Method	Level
2.1.2 Product ingredients and no harm to the environment	The applying organization shall be in the possession of documentation from the supplier which show (from which can be derived) ^{c)} that the product does not contain substances that have been classified with: <ul style="list-style-type: none"> R50; R50/53; R51/53; R52; R52/53; R53; R59; conform EC directive 67/548/EEC and amendments, in concentrations for which notification on MSDS is compulsory, conform EC directive 1999/45/EC and amendments.	Technical file (suppliers' documentation and MSDS assessment)	Major
2.1.3 Product ingredients and no hazard to health	The applying organization shall be in the possession of documentation from the supplier which show (from which can be derived) that the product does not contain substances that have been classified as: <ul style="list-style-type: none"> - very toxic, with R26, R27, R28, R39 or combinations hereof; - toxic, with R23, R24, R25, R39, R48 or combinations hereof; - carcinogens, with R40, R45 or R49; - sensitizers, with R42 and/or R43, in concentrations higher than 0,1% conform EC directive 67/548/EEC and 1999/45/EC annex V.L9 and amendments); - toxic for reproduction, with R60, R61, R62, R63 or R64; - mutagens, with R46 or R68; conform EC directive 67/548/EEC and amendments, in concentrations for which notification on MSDS is compulsory, conform EC directive 1999/45/EC and amendments.	Technical file (suppliers' documentation and MSDS assessment)	Major

a) Major nonconformities shall be eliminated within 1 month; a minor nonconformity in maximally 6 months (Section 3.3).

b) MSDS = Material Safety Data Sheet conform EC directive 91/155/EG and amendments.

c) The product is assessed 'not harmful for the environment', if the product does not contain ingredients that are harmful for the environment.

Aspect	Requirements to the product	Method	Level
2.1.4 Zinc	Zinc is not an (intended) element of the product. Possible zinc pollution does not exceed the maximum value of 0,2 ppm.	Technical file	Major
2.1.5 Fluor	The applying organization shall be in the possession of documents of the supplier indicating that the product has a maximum organic Fluor content of 0.04% (w/w). ^{a)}	Technical file / formula ^{b)} The formula shall specify the percentage Fluor tensides and telomeres, and the weight percentage of Fluor in these substances.	Major
2.1.6 Fire extinguishing gasses and GHG emissions	The GWP value ^{c)} of the components which are used in a fire extinguishing gas shall be equal to or lower than 1, over a time interval of 100 years.	Calculation on basis of a technical file	Major

a) Products which are already certified shall comply with this requirement before 1 December 2011.


b) The total formula of the product shall be given, of each ingredient the mass percentage and gram per litre shall be given. Of each ingredient its function shall be given. Possible pollution of the water with Fluor containing substances is not considered in the calculation.

c) Global warming potential (GWP) is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming. A GWP is calculated over a specific time interval.

2.2 Functionality criteria

Aspect	Requirement	Method	Level
2.2.1 Functionality of portable foam and CO2 fire extinguishers	Portable extinguishers (upto 20 kg) shall have a valid 'Rijkskeurmerk', or shall comply with the EN 3	Visual observation and check of the register of the Dutch NCP (Nationaal Centrum voor Preventie) or a research report proving compliance with EN 3	Minor
2.2.2 Functionality of wheeled foam and CO2 fire extinguishers	Wheeled extinguishers shall comply with EN 1866.	Research rapport proving compliance with EN 1866	Minor
2.2.3 Functionality of extinguishing solutions and agents for fire fighting installations (foam and CO2 extinguishers)	Extinguishing solutions and agents shall comply with EN 1568.	Research report proving compliance with EN 1568.	Minor
2.2.4 Functionality of inert and chemical extinguishing gasses for fire fighting installations (incl. CO2)	The applying organization shall be in the possession of documents of the supplier which indicate: <ul style="list-style-type: none"> - applied inert and chemical gasses comply with ISO 14520; - CO2 extinguishing gasses comply with VdS 2093 "Richtlinien für CO2-Feuerlöschanlagen". 	Research report proving compliance with ISO-14520, or VdS 2093	Minor

2.3 Communication criteria

Aspect	Requirement	Method	Level
<p>2.3.1 Milieukeur logo</p> 	<p>Milieukeur is a registered mark of SMK. Use of the logo by credential holders is optional. If the Milieukeur logo is used, the following conditions apply:</p> <ul style="list-style-type: none"> - Application of the Milieukeur logo is only allowed after written approval by the certification body (CB); - It is allowed to use the logo on letterheads, invoices, packaging, service-related communication, and promotional materials, such as websites, and brochures. Required is that there is a clear relationship with only the certified product(s). Logo use is prohibited if used for communication of non-certified products or services (also): <ul style="list-style-type: none"> - Allowed (example): "Company X has Milieukeur for product / service Y"; - Not allowed (example): "Company X has Milieukeur"; - If the Milieukeur logo is used, the unique registration number, which is assigned by the CB, shall be used in the logo ^{a)}; - The unique number must include the name or abbreviation of the CI; - Only the certified company is permitted to use the Milieukeur logo and unique registration number and only in relation to its certified products or services; - The Milieukeur logo may not surpass by size and prominence the brand and / or trade name of the product. Suggestion that Milieukeur is a trademark shall be avoided. <p>For requirements concerning the (colour and graphic) version of the logo see the "Guidelines Milieukeur logo". This document can be downloaded from the website: www.smk.nl or obtained by e-mail smk@smk.nl.</p>	<p>Observation: The unique registration number will be checked:</p> <ul style="list-style-type: none"> - Websites - Advertising leaflets - Packaging - Ads - Posters - Etc. <p>Supervision by the CB and SMK: To maintain the credibility of the Milieukeur label (for buyers, consumers and other certificate holders), the rules of using the registered name and logo of Milieukeur apply.</p> <p>In this context, are of importance the legal regulations of Milieukeur of June 16, 2006, article 4 (Logo and text) and 5 (Legal Protection Milieukeur), and the registration at the Benelux Trademarks Office (12-08-1992/ registration number 0516647).</p> <p>The general conditions of the Dutch Environmental Advertisement Code apply also ^{b)}.</p>	<p>Minor</p>

a) Certified companies shall use the registration number in the logo before 1 September 2011, this applies for the production of communication materials and the certified product(s), but not for materials and products already in stock.

b) The Dutch Law on Unfair Trade Practices of October 15, 2008 prohibits 'unfair' promotion, sale, and delivery of products and services to consumers. The inappropriate inclusion of a label is explicitly mentioned. The Consumer Authority may impose an administrative fine for violations of up to € 450.000,-.

Aspect	Requirement	Method	Level
2.3.2 Other environmental claims and logos	If other environmental claims and logos (e.g. of the producer) are stated on the product, a written approval, provided by SMK, shall be obtained. Statements on the product shall comply with the Dutch Advertisement Code, in particular with article 7 'indications and symbols'.	Auditing / observing	Minor
2.3.3 Information about Milieukeur	If information about Milieukeur is provided on the product, a written permission of SMK shall be obtained.	Auditing / observing	Minor
2.3.4 Complaint file	The company shall have a complaint file and at least: <ul style="list-style-type: none"> - Make a record of all complaints received considering the Milieukeur products; - Record how and when the company responded; - Record how the complaint was dealt with, which actions were taken, and if a solution was found. 	Yearly reassessment ^{a)} Product evaluation	Minor
2.3.5 Product changes	The company shall inform the CB of its intention to change (certain specifications of) the certified product, or to change (possibly) relevant aspects related to the certification requirements (for example a change in the production process) ^{b)} .	Yearly reassessment Random evaluation ^{c)} or infrared analysis ^{d)}	Minor
2.3.6 Information on fire class	With or on the product shall be described in the official local language of the country where the product is offered for sale the fire classes the product is suitable for (conform EN 3 or equivalent).	Auditing / observing	Minor
2.3.7 Information on product disposal	With or on the product shall be described in the official local language of the country where the product is offered for sale which procedures are to be followed, in order to correctly dispose of the product (after expiry date). ^{e)}	Auditing / observing	Minor

a) Following a complaint, the CB has the right to start an independent research.

b) The CB determines whether further investigation is necessary (see: Handbook of SMK "Rules Milieukeur certification systems", Article 7.4). If a change still has to be investigated, the certification is suspended by the CB. If a change causes a non-conformity, or the product is not within the scope of the certification scheme, the certificate is suspended or terminated.

c) The CB chooses, without prior notice, one aspect of the product or production process, on which product evaluation is performed.

d) Samples shall be taken by the CB, or by an independent organisation under the supervision of, or commissioned by the CB (see Section 3.2).

e) In the Netherlands, at least the following is mentioned:

- After product shelf life, the product must be handed over to, or refilled by an authorized service company;
- After 20 years, the fire extinguisher should be handed over to a chemical waste centre or to an authorized service company.

3. Requirements on the certification procedure

3.1 SMK Manual and the Dutch Accreditation Council

The requirements on the evaluation procedure, compliance assessment method, and the execution of certification in general, are laid down in the SMK Manual. The SMK requirements also apply to the Milieukeur certification scheme Fire Extinguishers. The Certifying Body (CB) must comply with the SMK Manual and must have (applied for) accreditation of the Dutch Accreditation Council for the certification scheme Fire Extinguishers, for which the CB must also have signed a license with SMK.

3.2 Inspection method of the Certifying Body

If reference is made to a 'standardized testing method', the sampling method and sample size shall also be according to the 'standardized testing method'. If no sample size method is mentioned, the following applies (in general): two samples shall be taken; one of these samples shall be used for the purpose of determining the test results. The second sample shall serve as a reference sample in case the assessment results are questioned and doubted. The assessment report shall establish sufficient proof that the used samples are representative for the to-be-certified product. To this end, the sample shall be taken by the CB, or by an independent organisation under the supervision of, or commissioned by the CB. If questions arise on the test results, the results obtained with the analyses of the reference sample shall take precedence over the first test results.

If examination is based on administrative records of the applicant, the sample shall cover a period of at least one month.

Minimal requirements on 'technical files', which are examined by a CB, are laid down in Appendix 2 of the SMK Manual (see *1). The 'technical file' should preferably include statements of third party laboratory investigations and/or of third party verified data e.g. on design, construction, specifications of materials, and certificates of suppliers (registered by the applying manufacturer). For colouring and aromatic substances, a supplier's testimony that the criteria / requirements are met is sufficient.

The CB shall assess in an initial examination if all requirements stated in the scheme are met. With "the initial examination" is meant examinations executed before the product is certified. The initial examination can consist of more than one procedure.

During the periodic product evaluation, an infra-red spectrum analysis report, performed by an independent laboratory shall be submitted once every two years (communication requirement 2.3.5). For the periodic product evaluation, samples shall be taken by the CB, or by an independent organisation under the supervision of the CB, or commissioned by the CB, during a physical inspection, or directly from the market, or from the company's trade / warehouse stocks. The annual inspection shall determine if the certified product is still precisely the same and evaluate the customer complaint files (communication requirement 2.3.4).

The inspection / audit method encompasses an inventory list check, including assessments on e.g. raw materials, suppliers, identification and input data, procurement and other administrative data. If present complaints are alarming or give cause for concern, additional, interim assessments can be performed.

3.3 Evaluation method of the Certifying Body

If the product does not meet one of the requirements, the end result is insufficient. The criteria can be of one of three levels: **minor, major, and critical major**. The environmental criteria are concerned as major non-conformities, and a deviation regarding the requirements for the criteria on the functionality and communication are considered minor non-conformities. This Milieukeur certification scheme has no critical major non-conformities.

If during an annual or interim inspection a minor non-conformity is found a period of maximally 6 months is given to solve the problem. If a major non-conformity is found, a period of 1 month is given. If the problem is not solved in the (agreed upon) period of time, the certificate is withdrawn. A critical major results in immediate withdrawal of the certificate and a one year exclusion.

3.4 The competency requirements on the audit team and lead auditor

The (commodity) researcher shall comply with the following requirements:

- Education: a bachelor degree in a technical subject. Knowledge in the field of environmental research and the units in which environmental effects are expressed. The level of knowledge shall be established by educational certificates or by proven experience in environmental research.
- Experience: at least two years of experience in commodity studies. For instance, work experience in quality inspections and product certification, laboratory research, etc.

The lead inspector shall not be involved in the direct implementation of the certification research of the concerned organization. He proves to have (general) knowledge of the contents of the relevant Milieukeur certification scheme by approving and signing the research program for the certification inspection. The lead inspector shall comply with the following requirements:

- Education: a bachelor degree in a technical subject.
- Experience: at least two years of experience in product certification, or in a similar field.

3.5 The Milieukeur certificate

The Milieukeur certificate is awarded by the CB and shall at least contain the following information:

_____ declares that the product _____
(Name Certification Body) (Product type and + trade name)

of _____
(Name and address certificate holder)



_____ complies with the requirements of the certification scheme Milieukeur Fire Extinguishers that was established by the Central Board of Experts of Milieukeur non-food of SMK.

The applied certification scheme:

Code and number : MK.64/BBM.6

Certificate details:

Registration number : (code Certification Body + unique number, max. 10 characters)

Date of issue :

Signature:

Location :

Signature :

Signed by :

Up-to-date information on certified products and the certification scheme can be found on: www.smk.nl