

EUROPEAN ECO-LABEL USER MANUAL



FOR SOIL IMPROVERS

This Manual is compiled by:

SMK
Eisenhowerlaan 150
P.O. Box 17186
2502 CD The Hague - The Netherlands
Tel: + 31 70 3 586 300
Fax: + 31 70 3 502 517
E-mail: milieukeur@milieukeur.nl
www.smk.nl

In cooperation with:

SV&A sustainability consultants
Rijnsburgerweg 159
P.O. Box 11133
2301 EC LEIDEN - The Netherlands
Tel: +31 71 519 10 05
Fax: +31 71 517 58 35
E-mail: svena@svena.nl
www.svena.nl

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For further information:

1) each of the Competent Bodies

http://ec.europa.eu/environment/ecolabel/tools/competentbodies_en.htm

2) the secretariat of the EUEB if appropriate

DG ENV D.3. Avenue de Beaulieu 9, B-1160 Bruxelles

tel +322/29/68075, 58924

fax +32229 55684

<http://ec.europa.eu/ecolabel>

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¹ Downloadable also from
http://ec.europa.eu/environment/ecolabel/product/pg_soilimprovers_en.htm

PURPOSE OF THIS USER MANUAL

This manual consists of **two parts**. The first one (PART 1) includes the general information concerning the European Eco-label. The second (PART 2) is intended to be a reference guide for applicants on how to apply for the European Eco-label soil improvers and under what conditions products can be certified.

These criteria have been established in terms of the Commission Decision 2006/799/EC and were published in the Official Journal on 3 November 2006 - OJ L325/28 (hereinafter to be referred as "the Decision").

The criteria cover all relevant environmental effects throughout all life cycle phases

To apply for the European Eco-label the products have to meet requirements for raw materials, hazardous substances, contaminants, nutrient loadings, product performance and product safety.

The ecological criteria for soil improvers aim in particular at promoting those products that:

- contribute to reducing soil and water pollution;
- promote the recycling of materials;
- contribute to enhanced soil fertility.

The criteria for this product category and background information are available at:
http://ec.europa.eu/comm/environment/ecolabel/product/pg_soilimprovers_en.htm

PART 1 General Information concerning the European Eco-label

1. The European Union Eco-label (referred to as the European Eco-label in this user manual) is Europe's official environmental label. The European Eco-label scheme is now part of a wider approach on Integrated Product Policy (IPP). "The Flower" was first established in 1992 and revised by Regulation (EC) No 1980/2000, which extended the scheme to cover services. In this manual, "product" refers to both goods and services.
2. <http://ec.europa.eu/ecolabel> is the European Commission's official website for the European Eco-label, you can find all background information at this website. All key documents are available and you can easily download the texts.
3. Participation in the scheme is voluntary. It is administered by officially appointed Competent Bodies in each EU member state. Competent Bodies are independent and have no vested interest. You find a list of Competent Bodies at:
http://ec.europa.eu/environment/ecolabel/tools/competentbodies_en.htm
4. Businesses whose products comply with the published product group definition and the criteria for the product can apply for the European Eco-label. The criteria for specific product groups are agreed by EU member states after consultation with relevant interests, including other departments within the European Commission and European representatives of industry, consumers, environmental organizations, retailers and public authorities.

5. A manufacturer, retailer or service provider who meets the criteria for a product group and who applies for the award of the European Eco-label, can market his eco-labelled product in all Member States of the European Union. The Flower is also recognised and present in those countries, which are signatories to the EEA Agreement (Norway, Iceland and Liechtenstein).
6. So far, criteria have been agreed for 24 product categories. You find an actual list of established product-groups and details on eco-labelled products and on manufacturers at <http://www.eco-label.com>
7. Manufacturers, importers, retailers or service providers should make their applications to the Competent Body in the Member State in which their product or service is manufactured, first marketed, or imported from a third country. If the product is manufactured in several Member States, the applicant is free to choose a Competent Body in one of those Member States.
8. Applicants should seek guidance from the Competent Bodies on the information needed in each case. The European Eco-label for each product group has its own environmental criteria (published in the Official Journal of the European Communities) and the information required to demonstrate compliance will depend on the relevant criteria.
9. The applicant either tests whether the product complies with the criteria for the relevant product group, or asks a laboratory to do the tests independently. The test costs are met by the applicant. The applicant compiles a dossier of relevant documents to show compliance, and submits this with the application form.
10. The Competent Body will conclude a contract covering the terms of use of the Flower label with each successful applicant. A standard contract has been prepared for this purpose which can be found at http://ec.europa.eu/environment/ecolabel/documents/pm_standardcontract_en.htm
11. The Competent Body can request the necessary documentation from the license holder in order to monitor the compliance with the product's criteria and the terms of use set out in the contract. The Competent Body can also visit the applicant's premises without prior notice.
12. The following table gives the indicative fees to be charged by Competent Bodies according to the Decision:

	Minimum	Maximum	Reductions (1)
Application fee covers the costs of processing the application.	EUR 300	EUR 1300	25% for SMEs and applicants from developing countries
	Minimum	Maximum	Reductions (2)
Annual fee for the use of the label = 0.15% of annual volume of sales of the product within the Community	EUR 500 per product group per applicant	EUR 25000 per product group per applicant.	25% for SMEs and applicants from developing countries 15% for companies registered under EMAS or certified under ISO 14001 Other reductions possible, please contact your Competent Body for further details.

(1) These reductions are cumulative.

(2) These reductions are cumulative, but shall not exceed in total 50%

These fees do not include the costs of testing and verification, which applicants have to meet themselves.

13. Product group criteria are usually valid for a period of 3-5 years according to the Commission Decision on the relevant product group. Ecological criteria are reviewed before they expire and may be revised. If criteria have been revised you will have to renew your contract. If criteria have been prolonged your contract is automatically renewed, as long as the criteria remain valid. You may use the European Eco-label from the date it is awarded until the end of the period of the validity of the criteria.
14. Retailers can ask for the European Eco-label, although only for products put on the market under their own brand name. As a retailer you can also request, or even insist that your suppliers apply for the European Eco-label. In this way you will also contribute to providing environmentally friendly products to your clients.
15. It is possible to have an European Eco-label for "own brand" products. If a product is sold under two brand names, you only need to submit one application.
16. If some of the characteristics of an eco-labelled product have changed you will not need to submit a new application if only characteristics that do not affect compliance with the criteria have changed. However, the Competent Body should be notified of significant modifications.
17. More information about the scheme can be found at the website <http://ec.europa.eu/ecolabel/>. You can also contact your national Competent Body to know more about the Scheme at the national level, to submit your application, etc.

PART 2 User Manual

2.1 INTRODUCTION

PART 2 provides guidelines to help you apply for the European Eco-label for Soil Improvers. For terms and definitions we refer to paragraph 2.2. Compliance is shown by a mixture of tests and applicant's declarations. More information with respect to test methods can also be found in paragraph 2.3). Applicants should complete the application forms (paragraph 2.4) and submit paper copies (with an original signature) to the Competent Body.

Filling in these forms (or similar ones prepared by the Competent Body) must be done conscientiously by the applicant in order to compile in one single document all the necessary information, referring in particular to the origin of the product and the production process, the application criteria, limit values, trial outcomes and the laboratories carrying out the related analyses. For each criterion the applicant shall report in synthesis, analytical outcomes and reference certificates. Enclose all the analytical reports (Certificates) issued by laboratories, with relevant photocopies of the laboratory certifications. In cases of doubt, please contact 'your' Competent Body sufficiently in advance to avoid problems at a later stage of the process.

The application dossier must be sent to:

see Competent Body's reference.

For further information:

see Competent Body's reference.

Article 1 of the Commission Decision specifies that an application is possible for the following product group:

Soil Improvers: Materials to be added to the soil in situ primarily to maintain or improve its physical properties, and which may improve its chemical and/or biological properties or activity.

The product group is generally open to all products both for the professional and hobby use.

The European Eco-label may only be awarded to products that fall into the definition and successfully pass the corresponding criteria essentially aiming to promote the use of renewable materials and/or re-use of organic matter and to reduce risks from heavy metals and other hazardous substances.

2.2 TERMS AND DEFINITIONS

In this section terms and definitions recurring in the Commission Decision and in the User Manual are reported. The glossary is regarded to be useful for a uniform comprehension and in order to keep univocal interpretation on general principles, materials, test methods, etc.

Air volume: that part of the volume of a sample filled by air measured under standard suction conditions (suction pressure: 10 cm).

Ash: The inorganic matter or mineral residue of total solids that remains when a sample of SI is combusted at $450\pm 10^{\circ}\text{C}$ in the presence of excess air. The ash (%) is equal to 100 % of the dried sample minus the VS (volatile solids) in the dried sample.

Bark and composted bark: residual materials from primary machining of wood, used raw (without performing any biological treatment) or composted; mainly used as a mulch (mulching):

materials which applied to the surface of the soil reduce the loss of moisture, control weed growth, reduce the erosion and the evaporation) The quality of composted barks depends on tree species, grading and maturity.

Batch: see *product (or production) batch*.

Batch code: identification code (progressive number) which marks the product (or production) batch.

Bulk density: ratio of the dry mass and volume of the sample in grams per litre measured under standard suction conditions (suction pressure: 10 cm); it is sometimes referred to as "apparent density".

Carbon to Nitrogen ratio (C:N): the numerical ratio of the weight of total organic carbon to that of the sum of organic nitrogen plus inorganic nitrogen (N-NH₄ and N-NO₃).

Compost: the product resulting from the controlled biological decomposition of organic wastes in aerobic conditions (*see composting process*), that has been sanitised, stabilised and humified to a degree which is potentially beneficial to plant growth when used as a Soil Improver.

Composting process: a managed biological process that controls aerobic biological decomposition and transformation of *biodegradable materials* into end product called compost.

Dry matter: the portion of substance that is not comprised of water. The dry matter content (%) is equal to 100 % minus the *moisture content* %.

Dry Weight Basis: calculated on the basis of having been dried at 105 °C until reaching a constant mass, i.e. 100 % solids content.

Electrical Conductivity: measure of a solution's capacity to carry an electrical current; it varies both with the number and type of ions contained in the solution; it is an indirect measure of salinity.

Green waste compost: compost produced from organic waste from agriculture, forestry, green wastes from the food processing industry (non sluges) and/or landscaping.

Heavy Metals: elements whose specific gravity is approximately 5 or higher. They include lead, copper, cadmium, zinc, mercury, nickel, arsenic, chromium, molybdenum, fluorine, and selenium. High concentrations of one or more heavy metals in a soil may lead to toxic effects in plants and animals.

Household waste compost : Product obtained by composting organic fraction of household solid waste (food scraps and 'green' waste), obtained by separated source collection.

Maturity: Maturity (see also 'stability') can be defined as the point at which the end product is stable and the process of rapid degradation is finished, or, a biodegraded product that can be used in horticultural situations without any adverse effects. The term maturity can also be interpreted in a wide sense, and also includes the term stability. An attempt to define maturity could be that it is a measure of the compost's readiness for use that is related to the composting process. This readiness depends upon several factors, e.g. high degree of decomposition, low levels of phytotoxic compounds like ammonia and volatile organic acids.

Minerals: Minerals are natural compounds formed through geological processes.

Moisture content: the liquid fraction (%) that evaporates at 103 ± 2°C (EN 13040).

Organic material: material of plant and animal origin.

Organic matter (OM): The carbon fraction of a sample of SI which is free from water and inorganic substances, clarified in EN 13039 as 'loss on dry incineration' at 450 ± 10 °C.

Peat: largely organic residues of plants, incompletely decomposed through lack of oxygen. The result of the partial decomposition of sphagnum, other mosses and sedges.

Phytotoxicity: is the capacity of a compound (such as a plant protection product) to cause temporary or long-lasting damage to plants.

Porosity (total pore space): total volume of voids filled with water and/or air measured under standard conditions (suction pressure: 10 cm).

Product (or Production) batch: a defined quantity of SI produced, manufactured and packaged in the same facilities, with the same process technology and blend, and in the defined period (recommended maximum two months).

Sewage Sludge: residual sludge, whether treated or untreated, from urban waste water treatment plants, see definition set by the European Directive 86/278.

Sludge: a semi-solid residue precipitated by the treatment of waste water.

Soil improver: can loosely be used to describe any material which improves the physical, chemical and/or biological properties of soil. However, the more usual interpretation relates to materials which are added to soils to enhance their physical properties. Such materials include bulky organic manures, and various types of composted materials which may or may not also provide some useful quantities of plant nutrients. They can be subdivided in soil conditioner, planting materials or mulches.

Soil Improver constituent: material which is suitable as an ingredient of a soil improver.

Stability/Stabilisation: refers to a stage in the decomposition of organic matter during composting. The stability is measured as residual biological activity (i.e. oxygen consumption as determined using a Respiration Index, Self-heating test, Solvita test, or other suitable methods). Material that is not stable, but still putrescent, gives rise to nuisance odours and may contain organic phytotoxins.

Test methods: Analytical methods approved by Member States, institutions, standardising bodies (CEN, UNI, DIN, BSI, AFNOR, OENORM etc.) or by reliable manufacturers' associations (BGK in Germany, TCA in UK, etc.).

Waste: any substance or object which the applicant discards or intends or is required to discard.

Water volume: that part of the volume of the sample filled by water under standard conditions (suction pressure: 10 cm).

Weed seeds: all viable seeds (and propagules) of undesired plant species found in end products.

2.3 TEST METHODS

The European Commission has given a standardisation mandate to CEN for the development of horizontal standards in the field of sludge, biowaste and soil under consideration of the characterisation of waste (Mandate M/330). The standards in these crosscutting environmental areas are needed in regard to existing and upcoming EU Directives.

The mandate considers standards on sampling and analytical methods for hygienic and biological parameters as well as inorganic and organic contaminants. Consequently the CEN Technical Board (BT) created a BT Task Force (BT/TF 151) "Horizontal Standards in the fields of sludge, biowaste and soil" (CEN/BT TF 151). On most sampling and analytical topics, final consultation will take place in the second half of 2006².

During the period in which Commission Decision (2006/799/EC) will be in force, test methods should be in line with the outcomes of BT/TF 151 as much as possible.

Until horizontal standards elaborated under the guidance of CEN Task Force 151 become available, testing and sampling shall be carried out in accordance with test methods developed by Technical

² see also: www.ecn.nl/horizontal

committee CEN 223 'Soil improvers and growing media'³.

Other test methods may be used if their equivalence is accepted by the Competent Body. For instance, if other consolidated and approved test methods for Soil Improvers are used in Member States or third countries, they may substitute some of those set by CEN. In such a case the applicant should request approval for use from the Competent Body (CB) sufficiently in advance and provide a reasonable justification in writing underpinning the equivalence and comparability of such methods. The Competent Body can ask for additional documentation if appropriate. Where required testing is not covered by CEN standards or CEN standards in progress of approval, other test methods are pointed out in this User Manual. These methods are indicative by nature and, as stated above, may be substituted by other methods in use.

Analysis should be carried out by reliable laboratories that are preferably accredited for the performance of the required tests. To facilitate work of Competent Bodies and applicants an indicative, but non-exhaustive list of quality programmes, quality labels, and/or related initiatives is given below. Again, request for approval for their use shall be addressed to the Competent Body sufficiently in advance, accompanied by written justification.

quality system / norm	originating country
BGBI.	Austria
BKAL	Austria
BSI PAS 100	UK
BVOR	Netherlands
CIC	Italy
DK-EPA	Denmark
KGVÖ	Austria
KIWA	Netherlands
legislation + technical norms	Czech Republic
NFU 44-051 / NFU 44-095	France
RAL	Germany
RVF	Sweden
Safe Sludge Matrix	UK
VLACO	Belgium

2.4 EXPLANATION OF CRITERIA AND APPLICATION FORMS

Introduction

This chapter reports the ecological criteria established by the specific Commission Decision 2006/799/EC to be fulfilled for the award. Compliance with these criteria and the limit values must be reported in detail in the Application Forms, which, together with test reports and other information material, constitute the application dossier (see also paragraph 2.1).

All individual criteria are highlighted and explained where necessary. Where applicable, testing methods are specified. Every criterion is followed by a declaration to be filled in and signed by the applicant. In every declaration, the applicant declares that the candidate product meets a specific criterion. Where applicable, the declaration also indicates backing documents, such as test reports have to be included in the application dossier.

³ contact: <http://www.cenorm.be/cenorm/index.htm>

2.4.1 General information applicant and candidate product

Please fill out this form and insert it as front page in your application dossier.

A. The applicant	
Full name of applicant company:	
Address:	
Contact name, and function:	
Tel no and fax no:	
E-mail:	
Web-site:	
B. The product	
Registered trade name(s) of product or product range:	
In case of product range: product names (or internal reference numbers) for products of product range:	
Name and address of manufacturing site (if different from above): Where the product is made outside the EU, please confirm that it has been or will be placed on the market in the <i>[insert name of Competent Body's country]</i>	
Other EU countries in which this product is manufactured in the same form (please give addresses of manufacturing sites):	
Other EU countries in which this product is sold (if sold under different names, please give names):	
Rough estimate of annual volume of product produced <i>[e.g. 200,000 tonnes or 150.000 m³]</i>	
Rough estimated value of annual sales, excluding VAT, in the European Economic Area (i.e. the European Community plus Norway, Iceland and Liechtenstein) of the product at ex-factory prices (in € / £ etc., please specify currency).	

C. This application	
<p>Is this the first application for the European Eco-label for this product? (if not, when and where was the first application made, and with what outcome?)</p>	
<p>Please name any other environmental labeling schemes under which the product has already been registered, such as the Nordic Swan, Blue Engel, NF-Environment, Swedish Standard etc:</p>	
<p>The Competent Body will invoice applicants for a non-returnable application fee on receipt of the application. If the application is successful, the Competent Body will invoice the licensee for an annual fee and apply all relevant reductions.</p> <p>In the case of SMEs or product manufacturers of developing countries the fees will be reduced by at least 25%. Applicants who have already received certification under EMAS or ISO 14001 may be granted additional reductions in the annual fee.</p> <p>1. Is the company a SME? If so, please provide proof of status.</p> <p>2. Is the company situated in a developing country (for definition please contact the Competent Body) ? If so, please provide proof of status.</p> <p>3. Is the company registered under EMAS or certified under ISO 14001 and has the company in its environmental policy promised to keep the product group criterion in the standard-contracts period of validity, and is this promise established in the companies environmental objective?</p>	

2.4.2 Ingredients

Ingredients (criterion 1.1)

A product shall only be considered for the award of the European Eco-label if it does not contain peat and its organic matter content is derived from the processing and/or re-use of waste (as defined in Council Directive 75/442/EEC on waste and in Annex I to the said Directive⁴).

Processing is, for example, biological treatment like composting and anaerobic digestion. 'Re-use of waste materials' is, for example, the use of organic waste from primary manufactures, which can be employed as Soil Improver, or as an ingredient in such products, due to its physio-chemical characteristics. Examples of such are: bark remaining from timber mechanical manufacturing; rice hulls; coconut fibre and residuals from the food industry (such as specified under criterion 1.2, see paragraph 2.4.3). Minerals can be added to improve product characteristics (such as specified under criterion 1.3, see paragraph 2.4.4)

⁴ OJ L 194, 25.7.1975 (75/442/EEC) texts downloadable in all Community languages from e.g. <http://ec.europa.eu/celex>,
http://ec.europa.eu/celex/cgi/sga_cnct?celexext!prod&LANG=EN&BASE=bas-cen

Declaration ingredients (criterion 1.1)

This declaration must be completed by the applicant.

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that the product does not contain peat and that its organic matter content is derived from the processing and/or re-use of waste (as defined in Council Directive 75/442/EEC on waste)⁵.

Detailed composition of the candidate product (all constituents > 5 % by volume) is as follows:

INGREDIENTS (please mark the applied materials)	% VOLUME (OR WEIGHT) OF PRODUCT
<input type="checkbox"/> green waste compost	
<input type="checkbox"/> household waste compost	
<input type="checkbox"/> (composted) bark	
<input type="checkbox"/> rice hulls	
<input type="checkbox"/> coconut waste	
<input type="checkbox"/> other (i), being:	
<input type="checkbox"/> other (ii), being:	
<input type="checkbox"/> sludge products (to be specified in declaration sludges)	
<input type="checkbox"/> added minerals (to be specified in declaration minerals)	
TOTAL %

Signed

Name / position

Date

Company stamp or seal

⁵ OJ L 194, 25.7.1975 (75/442/EEC) texts downloadable in all Community languages from e.g. <http://europa.eu.int/celex/>
http://europa.eu.int/celex/cgi/sga_cnct?celexext!prod&LANG=EN&BASE=bas-cen

2.4.3 Sludges

Sludges (criterion 1.2)

Products shall not contain sewage sludge. (Non-sewage) sludges are allowed only if they meet the following criteria: Sludges are identified as one of the following wastes according to the European list of wastes (as defined by Commission Decision 2001/118/EC amending Decision 2000/532/EC⁶): 02 03 05 / 02 04 03 / 02 05 02 / 02 06 03 02 07 05. Sludges are single source separated, meaning that there has been no mixing with effluents or sludges outside the specific production process. Single source sludges from a number of sources may be applied. Maximum concentrations of heavy metals in the waste before treatment (mg/kg dry weight) meet the requirements of criterion 2. A Declaration of conformity must be added for every single source sludge applied. Sludges shall meet all other European Eco-label criteria specified in section 2.4, in which case they are considered to be sufficiently stabilized and sanitized.

⁶ OJ L 47, 16.2.2001, p. 1.

Declaration sludges (criterion 1.2)

This declaration must be completed by the applicant.

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that:

- the candidate product does not contain sludges;
- the candidate product contains (products derived from) sludges. A detailed specification of sludges is given in the table below.

We declare that the sludges are single source separated and that we add test reports for the concentrations of heavy metals in every single source sludge in compliance with criterion 2.

Sludge origins (Code according European list of waste) - single source separated (please mark the applied materials)	% volume (or weight) of product	number of sources
<input type="checkbox"/> 02 03 05 (fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco; conserve production; yeast and yeast extract production, molasses preparation and fermentation)		
<input type="checkbox"/> 02 04 03 (sugar processing)		
<input type="checkbox"/> 02 05 02 (dairy products industry)		
<input type="checkbox"/> 02 06 03 (baking and confectionary industry)		
<input type="checkbox"/> 02 07 05 (beverages except coffee, tea and cocoa)		
Total % volume (or weight) of sludge in product		

Signed

Name / position

Date

Company stamp or seal

2.4.4 Minerals

Minerals (criterion 1.3)

Minerals shall not be extracted from:

- notified sites of Community importance pursuant to Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora⁷,
- Natura 2000 network areas, composed of the special protection areas pursuant to Council Directive 79/409/EEC on the conservation of wild birds⁸, and those areas under Directive 92/43/EEC together, or equivalent areas located outside the European Community that fall under the corresponding provisions of the United Nations' Convention on Biological Diversity.

Minerals applied as or in soil improvers are for example sand, clay, perlite, and mineral wool (as far as allowed by National legislation). The criteria also apply to minerals imported from non EU-countries in which case the provisions of the United Nations' Conventions on Biological Diversity are guiding.

Declaration minerals (criterion 1.3)

This declaration must be completed by the applicant.

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that:

- the candidate product DOES NOT contain added minerals; or,
- the candidate product DOES contain added minerals. A detailed specification of minerals is given in the table below.

We declare that applied minerals are not extracted from notified sites of community importance or Natura 2000 network areas or equivalent areas outside the EU that fall under the provisions of the United Nations' Convention on Biological Diversity. For every added mineral, declaration(s) of compliance issued by the appropriate authorities have been added to the application dossier.

Specification of (added) minerals (please mark the applied % Volume (or weight) of product materials)

- sand
- clay
- perlite
- mineral wool
- other mineral (i), being:
- other mineral (ii), being:

Signed

Name / position

Date

Company stamp or seal

⁷ OJ L 206, 22.7.1992, p. 7

⁸ OJ L 59, 25.4.1979, p. 1.

2.4.5 Limitation of hazardous substances

Limitation of hazardous substances (criterion 2)

In the organic growing media constituents, the content of the following elements shall be lower than the values shown below, measured in terms of milligrams per kilogram of dry weight (mg kg^{-1} d.w.):

Zn	300	mg.kg^{-1}
Cu	100	mg.kg^{-1}
Ni	50	mg.kg^{-1}
Cd	1	mg.kg^{-1}
Pb	100	mg.kg^{-1}
Hg	1	mg.kg^{-1}
Cr	100	mg.kg^{-1}

Limit values are applicable to organic constituents only. Maximum allowable concentrations specified below (in mg kg^{-1} d.w.) are applied only to products containing material from industrial processes, such as rice hulls, peanut hulls or sludges from the agro-food industry:

Mo	2	mg.kg^{-1}
Se	1.5	mg.kg^{-1}
As	10	mg.kg^{-1}
F	200	mg.kg^{-1}

limit values are valid unless national legislation is more strict.

Analytical tests according EN 13650 and ISO 16772 [Hg] are made on a representative sample from a product batch and at least one further representative sample from a different product batch, each of which was produced in the three months before the application date.

Declaration hazardous substances (criterion 2) (organics only)

A declaration must be included for the final product but also for every sludge component applied in the product (ref.: requirement 1.2).

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that (please mark):

our product meets the specified limit values. Average measured values are:

- Zn measured: mg.kg⁻¹
- Cu measured: mg.kg⁻¹
- Ni measured: mg.kg⁻¹
- Cd measured: mg.kg⁻¹
- Pb measured: mg.kg⁻¹
- Hg measured: mg.kg⁻¹
- Cr measured: mg.kg⁻¹

the candidate product does NOT contain materials from industrial processes, or

the candidate product DOES contain materials from industrial processes, and meets the specified limit values. Average measured values are:

- Mo measured: mg.kg⁻¹
- Se measured: mg.kg⁻¹
- As measured: mg.kg⁻¹
- F measured: mg.kg⁻¹

Analytical test reports (EN 13650 and ISO 16772 [Hg]) on heavy metal contents of the end product (two different production batches produced within three months before the application date) and test reports on sludge components (if applicable - an individual analysis for every single sludge source) have been added to the application dossier.

Signed

Name / position

Date

Company stamp or seal

2.4.6 Physical contaminants

Physical contaminants (criterion no. 3)

In the final product (with mesh size 2 mm), the content of glass, metal and plastic shall be lower than 0.5% as measured in terms of dry weight.

The method expects that content of glass, plastics and metals (expressed as sum of each contribution) is valued in the product fraction exceeding 2 mm.

Analytical tests shall be made on a representative sample from a product batch and at least one further representative sample from a different product batch, each of which was produced in the three months before the application date.

Test methods are for example:

- UNI 10780 (I,1999)⁹
- BGK (D,1998)¹⁰

Declaration physical contaminants (criterion no. 3)

A declaration must be completed by the applicant.

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that in our product (with mesh size 2 mm), the content of glass, metal and plastic is lower than 0.5% as measured in terms of dry weight.

Measured value: % physical contaminants as measured in terms of dry weight.

We add an analytical report specifying testing method and results to the application dossier.

Signed

Name / position

Date

Company stamp or seal

⁹ UNI 10780 pubbl. 31.12.1998 Code ICS 13.030.50.65.080, <http://catalogo.uni.com/catalogo/home.html>

¹⁰ Methodenbuch zur Analyse von Kompost, Bundesguetegemeinschaft Kompost e.V. (BGK), ISBN 3-928179-32-2. Koeln, 1998 (D)

2.4.7 Nitrogen

Nitrogen (criterion 4)

The concentration of nitrogen in the product shall not exceed 3 % total N (by weight) and inorganic N must not exceed 20% total N (or organic N \geq 80%).

A high level of organic N secures that N is released only slowly after application.

Analytical tests shall be made on a representative sample from a product batch and at least one further representative sample from a different product batch, each of which was produced in the three months before the application date.

Testing methods:

- Ntotal: pr EN 13654/1-2
- Nmineral: pr EN13652

Declaration nitrogen (criterion 4)

A declaration must be completed by the applicant.

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that in our product:

- the concentration of nitrogen does not exceed 3 % total N (by weight), and that
- the concentration of inorganic N does not exceed 20% total N (or organic N \geq 80%)

Measured values: % total N (by weight) and % inorganic N of total N.

We declare that an analytical report specifying testing method and results has been added to the application dossier.

Signed

Name / position

Date

Company stamp or seal

2.4.8 Dry matter and organic matter

Dry matter and organic matter (criterion 5a)

Products shall be supplied in a solid form and contain not less than 25 % dry matter by weight and not less than 20 % organic matter by dry weight (measured by loss on ignition).

Analytical tests shall be made on a representative sample from a product batch and at least one further representative sample from a different product batch, each of which was produced in the three months before the application date.

Test methods:

- Dry matter content: EN 13040
- Organic matter content: EN 13039

Declaration dry matter and organic matter (criterion 5a)

A declaration must be completed by the applicant.

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that:

- our product is supplied in a solid form, and that
- our product contains not less than 25 % dry matter by weight, and that
- our product contains not less than 20 % organic matter by dry weight (measured by loss on ignition).

Measured values: % dry matter by weight and % organic matter by dry weight.

We add an analytical report specifying testing method and results to the application dossier.

Signed

Name / position

Date

Company stamp or seal

2.4.9 Plant emergence and growth

plant emergence and growth (criterion 5b)

Products shall not adversely affect plant emergence or subsequent growth.

The applicant shall provide, together with the European Eco-label application, results from a vegetative trial (germination test, phytotoxicity test, growing-on test, etc) attesting benefits of the product regarding plant development.

Analytical tests shall be made on a representative sample from a product batch and at least one further representative sample from a different product batch, each of which was produced in the three months before the application date.

Test method: an overview and evaluation of standard test methods including a draft horizontal standard has been compiled as part of Project Horizontal. Ref.: Baumgarten, A., and Spiegel, H., Phytotoxicity (Plant tolerance), Horizontal-8, Agency for Health and Food Safety, Vienna, Austria, April 2004, the report can be downloaded from <http://www.ecn.nl/horizontal/downloads/finaldeskstudies/>. See also paragraph 2.3 (test methods)

Declaration plant emergence and growth (criterion 5b)

A declaration must be completed by the applicant.

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that our product does not adversely affect plant emergence or subsequent growth.

We add an analytical report specifying testing method and results to the application dossier.

Signed

Name / position

Date

Company stamp or seal

2.4.10 Health and safety

Health and safety (criterion no. 6)

Products shall not exceed the maximum levels of primary pathogens as follows:

- *Salmonella spp*: absent in 25 g, and
- *Helminth Ova*: absent in 1.5 g, or
- *E. coli* < 1000 MPN/g

Helminth Ova test is to be executed only for products whose compost component is not exclusively derived from green, garden or park waste.

E. coli test is to be executed only for products whose compost component is exclusively derived from green, garden or park waste.

Analytical tests shall be made on a representative sample from a product batch and at least one further representative sample from a different product batch, each of which was produced in the three months before the application date.

Parameters/units:

- Salmonella: No./25 g f.w.
- Helminth Ova: No./1.5 g (applicable only if NOT exclusively green, garden and park waste)
- *E. coli*: MPN/g (applicable only if exclusively green, garden and park waste)

Test methods:

- Salmonella: ISO 6579
- Helminth Ova: prXP X33-017 (applicable only if NOT exclusively green, garden and park waste)
- *E. coli*: MPN/g: ISO 11866-3 (applicable only if exclusively green, garden and park waste)

Declaration health and safety (criterion no. 6)

A declaration must be completed by the applicant.

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that the compost component in our product (please mark the appropriate option):

- the compost component in our product is exclusively derived from green, garden or park waste, that Salmonella is absent and that the product contains less E. Coli then 1000 MPN/g. Measured values:

.....(No./25 g f.w. – Salmonella)

..... (MPN/g - E. coli).

- the compost component in our product is NOT exclusively derived from green, garden or park waste, and that Salmonella and Helminth Ova are absent. Measured values:

.....(No./25 g f.w. - Salmonella)

..... (No./1.5 g - Helminth Ova).

We add (an) analytical report(s) specifying testing method and results to the application dossier.

Signed

Name / position

Date

Company stamp or seal

2.4.11 Viable seeds and propagules

Viable seeds and propagules (criterion 7)

In the final product, the content of weed seeds and the vegetative reproductive parts of aggressive weeds shall not exceed two units per litre.

The criterion covers all viable seeds and propagules of undesired plant species found in end products.

Test methods: an overview and evaluation of standard test methods including a draft horizontal standard has been compiled as part of Project Horizontal. Ref.: Baumgarten, A., and Dersch, G., Contamination with Viable Weed Seeds and Plant Propagules, Horizontal-8, Agency for Health and Food Safety, Vienna, Austria, April 2004, the report can be downloaded from; <http://www.ecn.nl/horizontal/downloads/finaldeskstudies/>. See also paragraph. 2.3.

Declaration viable seeds and propagules (criterion 7)

A declaration must be completed by the applicant.

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that the content of weed seeds and the vegetative reproductive parts of aggressive weeds does not exceed two units per litre.

Measured value: units per litre

We add an analytical report specifying testing method and results to the application dossier.

Signed

Name / position

Date

Company stamp or seal

2.4.12 Information provided with the product

Information provided with the product (criterion 8)

The following information shall be provided with the product, either written on the packaging or on accompanying fact-sheets:

General information:

- a) the name and address of the body responsible for marketing;
- b) a descriptor identifying the product by type, including the wording 'SOIL IMPROVER';
- c) a batch identification code;
- d) the quantity (in volume);
- e) the main input materials (those over 5% by volume) from which the product has been manufactured.

If applicable:

The following information about the use of the product shall be provided with the product, either written on the packaging or on accompanying fact-sheets:

- a) the recommended conditions of storage and the recommended 'use by' date;
- b) guidelines for safe handling and use;
- c) a description of the purpose for which the product is intended and any limitations on use;
- d) a statement about the suitability of the product for particular plant groups (e.g. calcifuges or calcicoles);
- e) pH and Carbon to Nitrogen (C/N) ratio;
- f) a statement about the stability of organic matter (stable or very stable) by national or international standard;
- g) a statement on recommended methods of use;
- h) in hobby applications: recommended rate of application expressed in kilograms or litres of product per unit surface (m²) per annum

General information is obligatory (unless national legislation requires otherwise).

Regarding the 'If applicable' items: in some cases, information items are irrelevant to the specific product, its application, redundant or in conflict with national legislation. These information items can then be omitted, but only if a satisfactory justification is provided by the applicant.

$$C/N = (\text{organic matter} \times 0,58) / N$$

Parameters/units:

- quantity: litre or m³
- Organic matter content: % d.w.
- Ntotal: %d.w.
- pH: -

Testing methods:

- quantity: EN 12580
- organic matter: EN 13039
- Ntotal: prEN 13645/1-2
- pH: EN 13037

Declaration information provided with the product (criterion 8)

This declaration must be completed by the manufacturer.

I/We, as the authorized signatory/ies of the manufacturer of the candidate product declare that the following information appears either on the packaging or on accompanying fact-sheets of the candidate product:

- the name and address of the body responsible for marketing;
- a descriptor identifying the product by type, including the wording 'SOIL IMPROVER';
- a batch identification code;
- the quantity (in volume);
- the main input materials (those over 5% by volume) from which the product has been manufactured.

In addition, the following information is provided (please mark the information items that are provided):

- the recommended conditions of storage and the recommended 'use by' date;
- guidelines for safe handling and use;
- a description of the purpose for which the product is intended and any limitations on use;
- a statement about the suitability of the product for particular plant groups (e.g. calcifuges or calcicoles);
- pH and Carbon to Nitrogen (C/N) ratio;
- a statement about the stability of organic matter (stable or very stable) by national or international standard;
- a statement on recommended methods of use;
- in hobby applications: recommended rate of application expressed in kilograms or litres of product per unit surface (m²) per annum

We declare that for any information item that has NOT been marked (i.e. information items not provided with the product), a written and satisfactory justification for the omission has been added to the application dossier.

We declare Information appears on or with the product in such a way as to be clearly visible for users / consumers.

We furthermore declare that Box 2 of the European Eco-label includes the following text:

- “- contributes to reducing soil and water pollution;
- promotes the recycling of materials;
- contributes to enhanced soil fertility.

For more information, visit the European Eco-label website: <http://www.eco-label.com>”

A sample of packaging and/or factsheet provided with the product has been added to the application dossier.

Signed

Name / position

Date

Company stamp or seal

ANNEX I

Commission Decision

establishing ecological criteria for the award of the community eco-label to Soil Improvers (SI).