

EN
ANNEX

EU ECOLABEL CRITERIA

Criteria for awarding the EU Ecolabel to growing media, soil improvers and mulch:

- 1) Constituents
- 2) Organic constituents
- 3) Mineral growing media and mineral constituents
- 4) Recycled/recovered materials and renewable materials in growing media
- 5) Limitation of hazardous substances
- 6) Health and safety
- 7) Stability
- 8) Physical Contaminants
- 9) Organic matter and dry matter
- 10) Viable weed seeds and plant propagules
- 11) Plant response
- 12) Growing media features
- 13) Provision of information
- 14) Information appearing on the EU Ecolabel

Table 1- Applicability of the different criteria to each type of product covered by the scope

Table 1. Applicability of the different criteria to each type of product covered by the scope

Criterion	Growing media	Soil improvers	Mulch
Criterion 1 Constituents	x	x	x
Criterion 2 Organic constituents	x	x	x
Criterion 3.1. Mineral growing media and mineral constituents: Energy consumption and CO ₂ emissions	x		
Criterion 3.2 Mineral growing media and mineral constituents: Sources of mineral extraction	x	x	x
Criterion 3.3 Mineral growing media and mineral constituents: Mineral growing media use and after use	x		
Criterion 4 Recycled/recovered materials and renewable materials in growing media	x		
Criterion 5.1 Limitation of hazardous substances – Heavy metals	x	x	x
Criterion 5.2 Limitation of hazardous substances – Persistent Organic Pollutants	x	x	x
Criterion 5.3 Limitation of hazardous substances – Hazardous substances and mixtures	x	x	x
Criterion 5.4 Limitation of hazardous - substances listed in accordance with Article 59(1) of Regulation (EC) No 1907/2006	x	x	x
Criterion 6 Health and safety	x	x	x
Criterion 7 Stability	x	x	x
Criterion 8 Physical contaminants	x	x	x
Criterion 9 Organic matter and dry matter		x	x
Criterion 10 Viable weed seeds and plant propagules	x	x	
Criterion 11 Plant response	x	x	
Criterion 12 Growing media features	x		
Criterion 13 Provision of information	x	x	x

Criterion 14 Information appearing on the EU Ecolabel	x	x	x
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ASSESSMENT AND VERIFICATION REQUIREMENTS

The specific assessment and verification requirements are indicated within each criterion.

Where the applicant is required to provide declarations, documentation, analyses, test reports, or other evidence to show compliance with the criteria, these may originate from the applicant and/or their supplier(s) as appropriate.

Competent bodies shall preferentially recognise tests which are accredited according to ISO 17025 and verifications performed by bodies which are accredited under the EN 45011 standard or an equivalent international standard.

Where appropriate, test methods other than those indicated for each criterion may be used if the competent body assessing the application accepts their equivalence. Where appropriate, competent bodies may require supporting documentation and may carry out independent verifications.

As pre-requisite, the product must meet all respective legal requirements of the country (countries) in which the product is intended to be placed on the market. The applicant shall declare the product's compliance with this requirement.

The sampling shall be carried out according the standard EN 12579:2013 Soil improvers and growing media – Sampling. Samples shall be prepared according the standard EN 13040:2007 Soil improvers and growing media - Sample preparation for chemical and physical tests, determination of dry matter content, moisture content and laboratory compacted bulk density.

For the application year, the sampling and test frequency shall fulfil the requirements set in Appendix 1, and for the following years, the sampling and test frequency shall fulfil the requirements set in Appendix 2.

For product manufacture plants using waste/animal by-product-derived materials, except those that are waste treatment plants, the sampling and test frequencies for the application year and the following years will be the same as the frequencies set for product manufacture plants not using waste/animal by-product-derived materials, if their suppliers of the waste/animal by-product-derived materials comply with the EU Ecolabel criteria for soil improvers. The applicant shall provide the Competent Body with the test reports from the suppliers, together with the documentation to ensure the compliance of the suppliers with the EU Ecolabel criteria. The Competent Body may recognize the sampling and testing frequencies within the national or regional legislation and standards as valid to ensure the compliance of the EU Ecolabel criteria of the suppliers of waste or animal by-products derived materials.

Criterion 1 – Constituents

This criterion applies to growing media, soil improvers and mulch.

The constituents admitted shall be organic and/or mineral constituents.

Assessment and verification:

The applicant shall provide the Competent Body with the list of constituents of the product..

Criterion 2 – Organic constituents

This criterion applies to growing media, soil improvers and mulch.

Criterion 2.1

A product shall not contain peat.

Criterion 2.2

The organic constituents of a product shall be:

- Materials derived from recycling or recovery;
- Materials derived from the recycling of the bio-waste from separate collection, as defined in the Directive 2008/98/EC of the European Parliament and of the Council¹;
- Materials derived from animal by-products category 2 and 3 for which composting and/or digestion is allowed according to Regulation (EC) No 1069/2009 of the European Parliament and of the Council² and implementing Regulation (EU) 142/2011³;
- Materials derived from by-products, as defined in article 5 of Directive 2008/98/EC;
- Materials derived from the exclusions covered in Article 2.1.(f) of Directive 2008/98/EC.

Materials partially or completely derived from

- the organic fraction of mixed municipal household waste separated through mechanical, physicochemical, biological and/or manual treatment;
- municipal sewage water treatment sludge
- sludges derived from the paper industry
- sludges derived from materials other than those allowed in Criterion 2.3.
- animal by-product category 1 materials according to ABP Regulation (EC) No 1069/2009.

¹ Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3-30).

² Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation) (OJ L 300, 14.11.2009, p. 1-33).

³ Commission Regulation (EU) No 142/2011 of 25 February 2011 implementing Regulation (EC) No 1069/2009 (OJ L 54, 26.02.2011, p. 1–254).

are not allowed as organic constituents.

Criterion 2.3

Materials derived from recycling or recovery of sludges are only allowed if the sludges comply with the following requirements:

- (a). They are identified as one of the following wastes according to the European List of Wastes, as defined by Decision 2000/532/EC⁴ presented in Table 2:

Table 2. Sludges allowed and their codes according to the European List of Wastes

0203 05	sludges from on-site effluent treatment in the preparation and processing of fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco, conserve production, yeast and yeast extract production, molasses preparation and fermentation;
0204 03	sludges from on-site effluent treatment in sugar processing;
0205 02	sludges from on-site effluent treatment in the dairy products industry;
0206 03	sludges from on-site effluent treatment in the baking and confectionery industry;
0207 05	sludges from on-site effluent treatment in the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa).

- (b). Are single-source separated, meaning that there has been no mixing with effluents or sludges outside the specific production process.

Assessment and verification:

The applicant shall provide the Competent Body with the information about the origin of each organic constituent of the product, and a declaration of compliance with the above requirement.

⁴ Commission Decision 200/532/EC of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste (OJ L 226, 06.09.2000, p. 3–24)

Criterion 3 – Mineral growing media and mineral constituents

Criterion 3.1 Energy consumption and CO₂ emissions

This criterion applies to mineral growing media only.

The manufacture of expanded minerals and mineral wool shall fulfil the following energy consumption and CO₂ emissions thresholds:

- Energy consumption / product ≤ 11 GJ/t product
- CO₂ emissions / product ≤ 0.8 t CO₂/t product

The ratio energy consumption/production shall be calculated as an annual average as follows:

$$\text{ratio} \frac{\text{Energy}}{\text{Product}} = \frac{1}{\sum_{i=1}^n \text{Production}_i} \cdot \sum_{i=1}^n \left(F + 2.5 \cdot \text{El}_{\text{grid}} + \left(\frac{H_{\text{cog}}}{\eta_{\text{refH}}} + \frac{\text{El}_{\text{cog}}}{\eta_{\text{refEl}}} \right) \cdot (1 - \text{PES}_{\text{cog}}) \right)_i$$

Where:

- n is the number of years of the period used to calculate the average
- i is each year of the period used to calculate the average
- *Production* is the mineral wool production in tonnes in the year i
- F is the annual consumption of fuels in the production process in the year i
- El_{grid} is the annual electricity consumption from the grid in the year i
- H_{cog} is the annual consumption of useful heat from cogeneration in the year i
- El_{cog} is the annual consumption of electricity from cogeneration in the year i
- η_{refH} and η_{refEl} are the reference efficiencies for the separate production of electricity and heat as defined in the Directive 2012/27/EU⁵ and calculated according to the Commission implementing Decision 2011/877/EU⁶ of 19 December 2011 establishing harmonised efficiency reference values for separate production of electricity and heat
- PES_{cog} is the primary energy saving of the cogeneration plant as defined in the Directive 2012/27/EU, in the year i

The ratio CO₂ emissions/production shall be calculated as an annual average as follows:

$$\text{ratio} \frac{\text{CO}_2 \text{ emissions}}{\text{Product}} = \frac{1}{\sum_{i=1}^n \text{Production}_i} \cdot \sum_{i=1}^n (\text{Direct CO}_2 + \text{Indirect CO}_2)_i$$

Where

⁵ Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1–56).

⁶ Commission Implementing Decision 2011/877/EU of 19 December 2011 establishing harmonised efficiency reference values for separate production of electricity and heat in application of Directive 2004/8/EC of the European Parliament and of the Council and repealing Commission Decision 2007/74/EC (OJ L 343, 23.12.2011, p. 91–96).

- n is the number of years of the period used to calculate the average
- i is each year of the period used to calculate the average
- *Production* is the mineral wool production in tonnes in the year i
- *Direct CO₂* is the CO₂ emissions as defined in Commission Regulation (EU) No 601/2012⁷, in the year i
- *Indirect CO₂* is the indirect CO₂ emissions due to final energy consumption in the year i , and shall be calculated as:

$$\text{Indirect CO}_2 \text{ emission} = FE_{\text{grid}} \cdot El_{\text{grid}} + FE_{\text{fuel cog}} \cdot \left(\frac{H_{\text{cog}}}{\eta_{\text{refH}}} + \frac{El_{\text{cog}}}{\eta_{\text{refEl}}} \right) \cdot (1 - PES_{\text{cog}})$$

Where

FE_{grid} is the EU average carbon intensity of the electricity grid, according to MEErP methodology (0.384 tCO₂/MWh = 0.107 tCO₂/GJe)

$FE_{\text{fuel cog}}$ is the CO₂ emission factor of the fuel consumed in the cogeneration plant

The direct CO₂ emissions shall be monitored according to Commission Regulation (EU) No 601/2012

The period to calculate the ratios energy consumption/product and CO₂ emissions/product shall be the last 5 years before the application. If the operation period of the plant is less than 5 years at the date of application, the ratio shall be calculated as an annual average of that operation period, which shall be one year minimum.

Assessment and verification

The applicant shall provide the Competent Body with a declaration which includes the following information:

- *Ratio Energy consumption (GJ)/product (tonne)*
- *Ratio CO₂ emissions (tonne)/product (tonne)*
- *Direct CO₂ emissions (tonnes) for each year of the period to calculate the average*
- *Indirect CO₂ emissions (tonnes) for each year of the period to calculate the average*
- *Fuels consumed, consumption of each fuel (GJ), sub-process/es of the manufacture process where they are consumed for each year of the period to calculate the average*
- *Electricity consumption from the grid (GJ final energy) f of each year of the period to calculate the average*
- *Useful heat consumption from cogeneration (GJ final energy) for each year of the period to calculate the average*
- *Electricity consumption from cogeneration (GJ final energy) for each year of the period to calculate the average*

⁷ Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council (OJ L 181, 12.07.2012, p. 30–104).

- *Reference efficiencies for separate production of heat and electricity*
- *Primary energy saving (PES) (%) of the cogeneration for each year of the period to calculate the average*
- *Identification of fuels used in cogeneration and their share in the fuel mix, for each year of the period to calculate the average*

The following documents shall be provided together with the declarations:

- *Annual emissions report according to Commission Regulation (EU) No 601/2012, for each year of the period to calculate the average*
- *Verification report finding the annual emissions report satisfactory according to Commission Regulation (EU) No 600/2012⁸, for each year of the period to calculate the average*
- *Records of electricity consumption from the grid provided by the supplier, for each year of the period to calculate the average*
- *Records of the useful heat and electricity consumption from cogeneration, both on-site and purchased, for each year of the period to calculate the average*

Criterion 3.2 Sources of mineral extraction

This criterion applies to growing media, soil improvers and mulch.

Extracted minerals can be used as constituents of the product provided that they are not extracted from:

- *Notified sites of Union importance pursuant to Council Directive 92/43/EEC⁹,*
- *Natura 2000 network areas, composed of the special protection areas pursuant to Council Directive 79/409/EEC¹⁰ on the conservation of wild birds, and those areas under Directive 92/43/EEC together, or equivalent areas located outside the European Union that fall under the corresponding provisions of the United Nations' Convention on Biological Diversity, or equivalent areas located outside the European Union that fall under the corresponding provisions of the United Nations' Convention on Biological Diversity.*

Assessment and verification

The applicant shall provide the Competent Body with a declaration of compliance with this requirement issued by the appropriate authorities.

⁸ Commission Regulation (EU) No 600/2012 of 21 June 2012 on the verification of greenhouse gas emission reports and tonne-kilometre reports and the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council (OJ L 181, 12.07.2012, p. 1–29).

⁹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22.07.1992, p. 7–50).

¹⁰ Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (OJ L 103, 25.04.1979, p. 1–18).

Criterion 3.3 Mineral growing media use and after use

This criterion is applicable to mineral growing media only.

The mineral growing media shall only be used for professional horticultural applications.

The applicant shall offer customers a structured collection and recycling service using third party service providers. The collection and recycling service shall cover a minimum of 70% v/v of the applicant sales across the European Union.

Assessment and verification

The applicant shall provide the Competent Body with a declaration that the mineral growing media is used for professional horticultural applications. The applicant shall include a statement about the professional horticultural application of the product in the information provided to the consumer.

The applicant shall inform the Competent Body about the option(s) on offer and their response to these options. In particular, the applicant shall provide the following documentation and information:

- *Contract documentation between the manufacturer and the service providers;*
- *Description of collection, processing and destinations;*
- *Annual overview of the total sales volume of growing media in the EU Member States and an annual overview of the sales volumes in areas of those Member States where collection and processing are on offer.*

Criterion 4 – Recycled/recovered and renewable materials in growing media

This criterion applies to growing media only.

Growing media products shall perform a minimum percentage of recycled/recovered content or renewable content, as follows:

- (a). The growing medium shall contain a minimum of 30% v/v of organic constituents (expressed as volume of organic constituent per total volume of the growing media),
or
- (b). The growing medium shall contain mineral constituents manufactured from a process using at least 30% w/w of recycled materials

Assessment and verification:

The applicant shall declare the following information:

- *Amount of the organic constituents declared for the compliance of criterion 1 (in volume)*
- *Amount of the mineral constituents declared for the compliance of criterion 1 (in volume for case (a) and in weight in case (b))*

Additionally, for the case (b) the applicant shall declare the following information about the mineral constituents manufacture process:

- Identification of raw material inputs, amount and origin
- Identification of waste material inputs, amount and origin

Criterion 5 – Limitation of hazardous substances

Criterion 5.1 Limits for heavy metals

This criterion applies to growing media, soil improvers and mulch.

(a). Soil improvers and mulch

The content of the following elements in the final product shall be lower than the values shown in Table 3, measured in terms of dry weight (DW) of the product.

Table 3. Heavy metals limits for soil improvers and mulch

Heavy metal	Maximum content in the product (mg/kg DW)
Cadmium (Cd)	1
Chromium total (Cr)	100
Copper (Cu)	100
Mercury (Hg)	1
Nickel (Ni)	50
Lead (Pb)	100
Zinc (Zn)	300

For growing media, the content of the following elements in the final product shall be lower than the values shown in Table 4, measured in terms of dry weight of the product.

Table 4. Heavy metal limits for Growing media

Heavy metal	Maximum content in the product (mg/kg DW)
Cadmium (Cd)	3
Chromium total (Cr)	150

Copper (Cu)	100
Mercury (Hg)	1
Nickel (Ni)	90
Lead (Pb)	150
Zinc (Zn)	300

Assessment and verification

The applicant shall provide the Competent Body with the test reports conducted in accordance with testing procedure indicated in respective EN standards presented in Table 5.

Table 5. Standard methods of extraction and measurement of heavy metals

Heavy metals	Method of measurement	Method of extraction
Cadmium (Cd)	EN 13650	For soil improvers, mulch and growing media, except mineral growing media: EN 13650 Soil improvers and growing media - Extraction of aqua regia soluble elements
Chromium total (Cr)	EN 13650	
Copper (Cu)	EN 13650	
Mercury (Hg)	EN 16175	
Nickel (Ni)	EN 13650	For mineral growing media: EN 13651 Soil improvers and growing media - Extraction of calcium chloride/DTPA (CAT) soluble nutrients and elements
Lead (Pb)	EN 13650	
Zinc (Zn)	EN 13650	

Criterion 5.2 Limits for Persistent Organic Pollutants (POPs)

This criterion applies to growing media, soil improvers and mulch.

The content of the following elements in the final product shall be lower than the values shown in Table 6, measured in terms of dry weight of the product.

Table 6. Limit for POP

Pollutant	Maximum content in the product (mg/kg DW)
PAH ₁₆	6

PAH₁₆ = sum of naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, indeno[1,2,3-cd]pyrene, dibenzo[a,h]anthracene and benzo[ghi]perylene

Assessment and verification

The applicant shall provide the Competent Body with the test reports conducted in accordance with testing procedure presented in Table 7.

Table 7. Standard test method for PAH₁₆

Pollutant	Test method
PAH ₁₆ (sum of naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, indeno[1,2,3-cd]pyrene, dibenzo[a,h]anthracene and benzo[ghi]perylene)	CEN/TS 16181 or equivalent

Criterion 5.3 Hazardous substances and mixtures

This criterion applies to growing media, soil improvers and mulch.

The final product shall not be classified and labelled as being acutely toxic, a specific target organ toxicant, a respiratory or skin sensitiser, or carcinogenic, mutagenic or toxic for reproduction hazardous to the environment, in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council¹¹ or Council Directive 67/548/EC¹².

The product shall not contain substances or mixtures classified as toxic, hazardous to the environment, respiratory or skin sensitisers, or carcinogenic, mutagenic or toxic for reproduction in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council or Council Directive 67/548/EC and as interpreted according to the hazard

¹¹Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1).

¹²Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (OJ 196, 16.8.1967, p. 1).

statements and risk phrases listed in Table 8 of this criteria. Any substance present at a concentration above 0.010% w/w in the product shall meet this requirement. Where stricter, the generic or specific concentration limits determined in accordance with Article 10 of Regulation (EC) No 1272/2008 shall prevail to the cut-off limit value of 0.010% w/w.

Table 8. Restricted hazard classifications and their categorisation

Acute toxicity	
Category 1 and 2	Category 3
H300 Fatal if swallowed (R28)	H301 Toxic if swallowed (R25)
H310 Fatal in contact with skin (R27)	H311 Toxic in contact with skin (R24)
H330 Fatal if inhaled (R23/26)	H331 Toxic if inhaled (R23)
H304 May be fatal if swallowed and enters airways (R65)	EUH070 Toxic by eye contact (R39/41)
Specific target organ toxicity	
Category 1	Category 2
H370 Causes damage to organs (R39/23, R39/24, R39/25, R39/26, R39/27, R39/28)	H371 May cause damage to organs (R68/20, R68/21, R68/22)
H372 Causes damage to organs (R48/25, R48/24, R48/23)	H373 May cause damage to organs (R48/20, R48/21, R48/22)
Respiratory and skin sensitisation	
Category 1A	Category 1B
H317: May cause allergic skin reaction (R43)	H317: May cause allergic skin reaction (R43)
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled (R42)	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled (R42)
Carcinogenic, mutagenic or toxic for reproduction	
Category 1A and 1B	Category 2
H340 May cause genetic defects (R46)	H341 Suspected of causing genetic defects (R68)

H350 May cause cancer (R45)	H351 Suspected of causing cancer (R40)
H350i May cause cancer by inhalation (R49)	
H360F May damage fertility (R60)	H361f Suspected of damaging fertility (R62)
H360D May damage the unborn child (R61)	H361d Suspected of damaging the unborn child (R63)
H360FD May damage fertility. May damage the unborn child (R60, R60/61)	H361fd Suspected of damaging fertility. Suspected of damaging the unborn child (R62/63)
H360Fd May damage fertility. Suspected of damaging the unborn child (R60/63)	H362 May cause harm to breast fed children (R64)
H360Df May damage the unborn child. Suspected of damaging fertility (R61/62)	
Hazardous to the aquatic environment	
Category 1 and 2	Category 3 and 4
H400 Very toxic to aquatic life (R50)	H412 Harmful to aquatic life with long-lasting effects (R52/53)
H410 Very toxic to aquatic life with long-lasting effects (R50/53)	H413 May cause long-lasting effects to aquatic life (R53)
H411 Toxic to aquatic life with long-lasting effects (R51/53)	
Hazardous to the ozone layer	
EUH059 Hazardous to the ozone layer (R59)	

The most recent classification rules adopted by the Union shall take precedence over the listed hazard classifications and risk phrases. Applicants shall therefore ensure that any classifications are based on the most recent classification rules.

The hazard statements and the risk phrases in generally refer to substances. However, if information on substances cannot be obtained, the classification rules for mixtures shall apply.

Substances or mixtures which change their properties through processing and thus become no longer bioavailable or undergo chemical modification in a way that removes the previously identified hazard are exempted from criterion 5.3.

This criterion does not apply to those products composed by:

- Materials not included in the scope of the Regulation (EC) No 1907/2006¹³ of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), according its Article 2(2).
- Substances covered by Article 2(7)(b) of the Regulation (EC) No 1907/2006 which sets out criteria for exempting substances within Annex V of this Regulation from the registration, downstream user and evaluation requirements.

In order to determine if this exclusion applies, the applicant shall screen any substance present at a concentration above 0.010% w/w.

Assessment and verification:

The applicant shall screen the presence of substances and mixtures that may be classified with the hazard statements or risk phrases reported in this criterion. The applicant shall provide the Competent Body with a declaration of compliance with this criterion for the product.

That declaration shall include related documentation, such as declarations of compliance signed by the suppliers, on the non-classification of the substances, mixtures or materials with any of the hazard classes associated to the hazard statements or risk phrases referred in Table 8 in accordance with Regulation (EC) No 1272/2008, as far as this can be determined, as a minimum, from the information meeting the requirements listed in Annex VII to Regulation (EC) No 1907/2006.

The information provided shall relate to the forms or physical states of the substances or mixtures as used in the final product.

The following technical information shall be provided to support the declaration of classification or non-classification for each substance and mixture:

- for substances that have not been registered under Regulation (EC) No 1907/2006 or which do not yet have a harmonised CLP classification: information meeting the requirements listed in Annex VII to that Regulation;*
- for substances that have been registered under Regulation (EC) No 1907/2006 and which do not meet the requirements for CLP classification: information*

¹³ Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (OJ L 396, 30.12.2006, p. 1)

based on the REACH registration dossier confirming the non-classified status of the substance;

- iii. for substances that have a harmonised classification or are self-classified: safety data sheets where available. If these are not available or the substance is self-classified then information shall be provided relevant to the substances hazard classification in accordance with Annex II to Regulation (EC) No 1907/2006;*
- iv. in the case of mixtures: safety data sheets where available. If these are not available then calculation of the mixture classification shall be provided according to the rules under Regulation (EC) No 1272/2008 together with information relevant to the mixtures hazard classification in accordance with Annex II to Regulation (EC) No 1907/2006.*

Safety data sheets shall be provided for the materials composing the product and for substances and mixtures used in the formulation and treatment of the materials remaining in the final part above a cut-off limit of 0.010 % w/w unless a lower generic or specific concentration limit applies in accordance with the Article 10 of Regulation (EC) No 1272/2008

Safety data sheets shall be completed in accordance with the guidance set out in sections 10, 11 and 12 of Annex II to Regulation (EC) No 1907/2006 (requirements for the compilation of safety data sheets). Incomplete safety data sheets shall require supplementing with information from declarations by chemical suppliers.

Information on intrinsic properties of substances may be generated by means other than tests, for instance through the use of alternative methods such as in vitro methods, by quantitative structure activity models or by the use of grouping or read-across in accordance with Annex XI to Regulation (EC) No 1907/2006. The sharing of relevant data across the supply chain is strongly encouraged.

In the case of mineral wool, the applicant shall also provide the following:

(a). Certificate awarded for the right to use the European Certification Board for Mineral Wool Products trademark to proof the compliance with the Note Q within the Regulation (EC) No 1272/2008.

(b). Test report according to ISO 14184-1 Textiles - Determination of formaldehyde - Part 1: Free and hydrolysed formaldehyde

Criterion 5.4 Substances listed in accordance with Article 59(1) of Regulation (EC) No 1907/2006

No derogation from the exclusion in Article 6(6) of Regulation (EC) No 66/2010 shall be given concerning substances identified as substances of very high concern and included in the list provided for in Article 59(1) of Regulation (EC) No 1907/2006, present in the product in concentrations > 0.010 % by weight.

Assessment and verification

Reference to the latest list of substances of very high concern shall be made on the date of application. The applicant shall provide a declaration of compliance with criterion 5.4, together with related documentation, including declarations of compliance signed by the material suppliers and copies of relevant SDS for substances or mixtures in accordance with Annex II to Regulation (EC) No 1907/2006 for substances or mixtures. Concentration limits shall be specified in the safety data sheets in accordance with Article 31 of Regulation (EC) No 1907/2006 for substances and mixtures.

Criterion 6 - Health and safety

This criterion applies to growing media, soil improvers and mulch.

The content of primary pathogens in the **final product** shall not exceed the maximum levels set in Table 9.

Table 9. Limit value proposed for pathogens

Pathogen	Limit
E. Coli	1000 CFU/g fresh weight
Samonella spp	absent in 25g fresh weight

CFU = colony-forming units

Assessment and verification

The applicant shall provide the Competent Body with the test reports conducted in accordance with testing procedure indicated in Table 10.

Table 10. Standard test method for pathogens

Parameter	Test method
E. Coli	CEN/TR 16193 or equivalent
Salmonella	ISO 6579

Criterion 7 - Stability

This criterion applies to **growing media, soil improvers and mulch, with the exemption of mulch totally composed by lignocellulosic constituents** and mineral growing media.

Soil improvers and mulch for non-professional applications and growing media for all applications, shall meet one of the requirements presented in Table 11.

Table 11. Stability requirements of soil improvers and mulch intended for non-professional applications and growing media intended for all applications

Stability parameter	Requirement
Maximum Respirometric index	15 mmol O ₂ /kg organic matter/h
Minimum Rottegrad, where applicable	IV (self-heating test temperature rise of maximum 20° C above ambient temperature)

Soil improvers and mulch for professional applications shall meet one of the requirements presented in Table 12.

Table 12. Stability requirements of soil improvers and mulch intended for professional applications

Stability parameter	Requirement
Maximum Respirometric index	25 mmol O ₂ /kg organic matter/h
Minimum Rottegrad, where applicable	III (self-heating test temperature rise of maximum 30° C above ambient temperature)

Assessment and verification

The applicant shall provide the Competent Body with the test reports conducted in accordance with testing procedure indicated in Table 13.

Table 13. Standard test method for stability

Parameter	Test method
Respirometric index	EN 16087-1 Soil improvers and growing media - Determination of the aerobic biological activity. Oxygen uptake rate (OUR)
Rottegrad	EN 16087-2 Soil improvers and growing media. Determination of the aerobic biological activity. Self heating test for compost

Criterion 8 - Physical Contaminants

This criterion applies to growing media, soil improvers and mulch.

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

Assessment and verification

The applicant shall provide the Competent Body with the test reports conducted in accordance with testing procedure indicated in CEN/TS 16202 Sludge, treated biowaste and soil - Determination of impurities and stones, or another equivalent testing procedure authorised by the Competent Body.

Criterion 9 - Organic matter and dry matter

This criterion applies to soil improvers and mulch.

The organic matter as loss on ignition of the **product** shall not be lower than 15% dry weight (% DW).

The dry matter content of the product shall not be lower than 25% fresh weight (% FW).

Assessment and verification

The applicant shall provide the Competent Body with test reports conducted in accordance with testing procedure presented in Table 14.

Table 14. Standard test methods for Dry matter and Organic matter

<i>Parameter</i>	<i>Test method</i>
Dry matter (% FW)	EN 13040 Sample preparation for chemical and physical tests, determination of dry matter content, moisture content and laboratory compacted bulk density
Organic matter as Loss on Ignition (%DM)	EN 13039 Soil improvers and growing media - Determination of organic matter content and ash

Criterion 10 - Viable weed seeds and plant propagules

This criterion applies to growing media and soil improvers.

In the final product, the content of viable weed seeds and plant propagules shall not exceed two units per litre.

Assessment and verification

The applicant shall provide the Competent Body with a test report in accordance with testing procedure indicated in CEN/TS 16201 Sludge, treated biowaste and soil - Determination of viable plant seeds and propagules, or another equivalent testing procedure authorised by the Competent Body.

Criterion 11 - Plant response

This criterion applies to growing media and soil improvers.

Products shall not adversely affect plant emergence or subsequent growth.

Assessment and verification

The applicant shall provide the Competent Body with the test report of a valid test in accordance with testing procedure indicated in EN 16086-1 Soil improvers and growing media - Determination of plant response - Part 1: Pot growth test with Chinese cabbage.

Criterion 12 Growing media features

This criterion only applies to growing media.

Criterion 12.1 - Electrical conductivity

The electrical conductivity of the final product shall be **below 100 mS/m**.

Assessment and verification

The applicant shall provide the Competent Body with the test report conducted in accordance with testing procedure indicated in EN 13038 Soil improvers and growing media - Determination of electrical conductivity.

Criterion 12.2 pH

The pH of the final product shall be in the range 4 - 7.

Assessment and verification

The applicant shall provide the Competent Body with the test report conducted in accordance with testing procedure indicated in EN 13037 Soil improvers and growing media - Determination of pH.

Criterion 12.3 Sodium content

The sodium content in water extract of the final product shall not exceed 150 mg/l fresh product.

Assessment and verification

The applicant shall provide the Competent Body with the test report conducted in accordance with testing procedure indicated in EN 13652 Soil improvers and growing media - Extraction of water soluble nutrients and elements.

Criterion 12.4 Chloride content

The chloride content in water extract of the final product shall not exceed 500 mg/l fresh product.

Assessment and verification

The applicant shall provide the Competent Body with the test report conducted in accordance with testing procedure indicated in EN 13652 Soil improvers and growing media - Extraction of water soluble nutrients and elements.

Criterion 13 - Provision of information

The following information shall be provided with the product (whether the product is packaged or unpackaged), either written on the packaging or on accompanying fact sheets.

Criterion 13.1 Soil improvers

- a) the name and address of the body responsible for marketing
- b) a descriptor identifying the product by type, including the wording
- c) a batch identification code
- d) the quantity (in weight)
- e) Moisture content
- f) the main input materials (those over 5% by weight) from which the product has been manufactured
- g) the recommended conditions of storage and the recommended 'use by' date;
- h) guidelines for safe handling and use
- i) a description of the purpose for which the product is intended and any limitations on use. This should include a statement about the suitability of the product for particular plant groups (e.g. calcifuges or calcicoles)
- j) pH (Method)
- k) Organic C content, total N content and inorganic N content
- l) C/N ratio
- m) Total phosphorus (%) and total potassium (%)
- n) a statement about the stability of organic matter (stable or very stable), for non-professional uses
- o) a statement on recommended methods of use
- p) in hobby applications: recommended rate of application expressed in kilograms of product per unit surface (m²) per annum

Criterion 13.2 Growing media

- a) the name and address of the body responsible for marketing
- b) a descriptor identifying the product by type, including the wording
- c) a batch identification code

- d) the quantity (in volume or number of slabs, in case of mineral wool, specifying the dimensions of the slab)
- e) Range of moisture content
- f) the main input materials (those over 5% by volume) from which the product has been manufactured
- g) the recommended conditions of storage and the recommended 'use by' date;
- h) guidelines for safe handling and use
- i) a description of the purpose for which the product is intended and any limitations on use. This should include a statement about the suitability of the product for particular plant groups (e.g. calcifuges or calcicoles)
- j) pH (Method)
- k) Electrical Conductivity (1:5 extraction)
- l) Germination inhibition (*EN 16086-1*)
- m) Growth inhibition (*EN 16086-1*)
- n) a statement about the stability of organic matter (stable or very stable)
- o) a statement on recommended methods of use
- p) statement about the professional horticultural application, in case of mineral growing media.

Criterion 13.3 Mulch

- a) the name and address of the body responsible for marketing
- b) a descriptor identifying the product by type, including the wording
- c) a batch identification code
- d) the quantity (in volume)
- e) Range of moisture content
- f) the main input materials (those over 5% by volume) from which the product has been manufactured
- g) guidelines for safe handling and use
- h) a description of the purpose for which the product is intended and any limitations on use. This should include a statement about the suitability of the product for particular plant groups (e.g. calcifuges or calcicoles)
- i) pH (Method)
- j) a statement about the stability of organic matter (stable or very stable), where applicable, for non-professional uses.
- k) a statement on recommended methods of use
- l) in hobby applications: recommended rate of application expressed in thickness

Assessment and verification:

The applicant shall declare that the product complies with this criterion and provide the competent body with a sample or samples of the user information.

Criterion 14 – Information appearing on the EU Ecolabel

The optional label with text box shall contain the following text:

- promotes the recycling of materials;
- promotes the use of materials produced in a more sustainable manner, thus reducing environmental degradation

For soil improvers and mulch, the additional information shall be included:

- contributes to reducing soil and water pollution,

The guidelines for the use of the optional label with the text box can be found in the ‘Guidelines for the use of the EU Ecolabel logo’ on the website:

<http://ec.europa.eu/environment/ecolabel/promo/pdf/logo%20guidelines.pdf>

Assessment and verification:

The applicant shall provide the Competent Body with a sample of product showing the label, together with a declaration of compliance with this criterion.

Appendix 1

Sampling and test frequency for the application year

Type of plant	Criterion	Annual input / output	Test frequency	
Waste/animal – by-product treatment plants	Cr 5.1 Heavy metals Cr 6. Health and safety Cr 7 Stability Cr 8 Physical contaminants Cr 9. Organic matter and dry matter Cr 10. Viable seeds/propagules Cr 11. Plant response Cr 12 Growing media features (if applicable)	Input (t) ≤ 3000	1 every 1000 tonnes input material rounded to the next integer	
		3000 < input (t) < 20000	4 (one sample every season)	
		Input (t) ≥ 20000	number of analyses per year = amount of annual input material (in tonnes)/10000 tonne + 1	
	Criterion 5.3 POP		Input (t) ≤ 3000	1
			3001 < input (t) < 10000	2
			10001 < input (t) < - 20000	3
			20001 < input (t) < 40000	4
			40001 < input (t) < 60000	5
			60001 < input (t) < 80000	6
			80001 < input (t) < 100000	7
	100001 < input (t) < 120000	8		

		120001 < input (t) < 140000	9
		140001 < input (t) < 160000	10
		160001 < input (t) < 180000	11
		Input (t) ≥ 180000	12
Product manufacture plants using waste/animal by-product-derived materials, except those that are waste treatment plants	Cr 5.1 Heavy metals Cr 6. Health and safety Cr 7 Stability Cr 8 Physical contaminants Cr 9. Organic matter and dry matter Cr 10. Viable seeds/propagules Cr 11. Plant response Cr 12 Growing media features (if applicable)	Output (m ³) ≤ 5000	Representative combined samples from 2 different batches according EN 12579
		Output (m ³) > 5000	Representative combined samples from 4 different batches according EN 12579
	Cr 5.2 POP	Output (m ³) ≤ 5000	Representative combined samples from 1 different batches according EN 12579.
		Output (m ³) > 5000	Representative combined samples from 2 different batches EN 12579
Product manufacture plants NOT	Cr5.1 Heavy metals Cr 6. Health and safety Cr 7 Stability	Output (m ³) ≤ 5000	Representative combined samples from 1 batch according EN 12579

using waste/animal by-product-derived materials	Cr 8 Physical contaminants Cr 9. Organic matter and dry matter Cr 10. Viable seeds/propagules Cr 11. Plant response Cr 12 Growing media features (if applicable)	Output (m ³) > 5000	Representative combined samples from 2 different batches according EN 12579
	Cr 5.2 POP	Regardless the input / output	Representative combined samples from 1 batch according EN 12579

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Appendix 2
Sampling and test frequency for the following years

Type of plant	Criteria	Annual input / output	Test frequency
Waste/animal – by-product treatment plants	Cr 5.1 Heavy metals Cr 6. Health and safety Cr 7 Stability Cr 8 Physical contaminants	Input (t) ≤ 1000	1
	Cr 9. Organic matter and dry matter Cr 10. Viable seeds/propagules Cr 11. Plant response Cr 12 Growing media features (if applicable)	Input (t) > 1000	number of analyses per year = amount of annual input material (in tonnes)/10000 tonne + 1 Minimum 2 and maximum 12
	Criterion 5.3 POP	Input (t) ≤ 10000	0.25 (once per 4 years)
		10001 < input (t) < 25000	0.5 (once per 2 years)
		25001 < input (t) < 50000	1
		50001 < input (t) < 100000	2
		100001 < input (t) < 150000	3
		150001 < input (t) < 200000	4
		200001 < input (t) < 250000	5
		250001 < input (t) < 300000	6
		300001 < input (t) < 350000	7
		350001 < input (t) < 400000	8
400001 < input (t) < 450000	9		

Type of plant	Criteria	Annual input / output	Test frequency
		450001 < input (t) < 500000	10
		500001 < input (t) < 550000	11
		Input (t) ≥ 550000	12
Product manufacture plants using waste/animal by-product-derived materials, except those that are waste treatment plants	Cr5.1 Heavy metals Cr 6. Health and safety Cr 7 Stability Cr 8 Physical contaminants Cr 9. Organic matter and dry matter Cr 10. Viable seeds/propagules Cr 11. Plant response Cr 12 Growing media features (if applicable)	Output (m ³) ≤ 5000	Representative combined samples from 1 different batches according EN 12579
		Output (m ³) > 5000	Representative combined samples from 2 different batches according EN 12579
	Cr 5.2 POP	Output (m ³) ≤ 15000	Representative combined samples from 1 batch according EN 12579, once each 4 years
		15000 < Output (m ³) < 40000	Representative combined samples from 1 batch according EN 12579, each two years
		Output (m ³) ≥ 40000	Representative combined samples from 1 batch according EN 12579, each year

Type of plant	Criteria	Annual input / output	Test frequency
Product manufacture plants NOT using waste/animal by-product-derived materials	Cr 5.1 Heavy metals Cr 6. Health and safety Cr 7 Stability Cr 8 Physical contaminants Cr 9. Organic matter and dry matter Cr 10. Viable seeds/propagules Cr 11. Plant response Cr 12 Growing media features (if applicable)	Regardless the input / output	Representative combined samples from 1 batch according EN 12579
	Cr 5.2 POP	Regardless the input / output	Representative combined samples from 1 batch according EN 12579, once each 4 years