# Summary of standards changes



# EU Equivalent documents updated Wednesday 8th January 2020 - version 1.2

This document summarises the changes made to the Soil Association EU Equivalent standards documents for version 1.2, including a recent amendment to the EU Organic Regulation.

If you have any questions, please contact the Standards Team by emailing <a href="mailto:standards@soilassociation.org">standards@soilassociation.org</a>.

## Update to the EU Organic Regulation

An amendment to the EU organic regulation\* has been published and comes into effect on Thursday 9<sup>th</sup> January. It covers permitted substances and practices for use in organic farming, growing, food manufacture and aquaculture. The Soil Association EU Equivalent standards documents have been updated to reflect these changes (version 1.2) and can be found here.

A summary of the changes is as follows:

- a. The list of fertilisers has been reviewed and amended. The definition of 'calcium carbonate' has been clarified and the requirement for Sodium Chloride to only be 'mined salt' has been removed. Five new substances have also been included:
  - biochar
  - mollusc waste
  - egg shells
  - humic and fulvic acids
- b. The list of pesticides and plant protection products has been reviewed and amended in some cases to be in line with horizontal legislation. The use of pyrethrins is now allowed from other plants than Chrysanthemum cinerariaefolium. Five new substances have also been included:
  - maltodextrin
  - hydrogen peroxide
  - terpenes (eugenol, geraniol and thymol)
  - sodium chloride
  - cerevisane

- c. **The list of feed additives** has been reviewed and amended. To align with general legislation for all feed additives, substance categories have been substituted and ID numbers have been amended. The silage additives reference has been clarified. Three new substances have also been included:
  - guar gum as a feed additive
  - sweet chestnut extract as a sensory additive
  - betaine anhydrous for monogastric animals and only from natural or organic origin
- f. The list of food additives and processing aids has been reviewed and amended. It includes changes to the conditions under which some substances can be used:
  - glycerol can now be used as a humectant in gel capsules and surface coating in tablets
  - bentonite as a processing aid
  - sodium hydroxide as a processing aid for the extraction of plant proteins

New permitted substances have also been included:

- tara gum powder as a thickener
- L (+) lactic acid for the extraction of plant proteins
- hop extract and pine rosin extract for antimicrobial purposes in sugar production

New requirements for substances to be organic by 2022 including for tara gum powder, lecithins, glycerol, locust bean gum, gellan gum, arabic gum, guar gum and carnauba wax.

To align with general legislation, substance categories have been substituted and names/ID numbers/Functional Groups have been amended.

\*New EU regulation 2019/2164 amends EC 889/2008.

## Consolidated Edits to Soil Association Organic Standards

The changes outlined below have been applied to the relevant standards documents e.g. aquaculture, abattoir & slaughtering, feed processing, farming & growing, food & drink and seaweed. In this document we have not included small edits that have been made to formatting, grammar and spelling. These changes include the recent EU regulation update as well as general edits to the standards guidance.

Key to text changes: (strikethrough = delete; underlined = new wording; normal text = no change)

## Changes to all standards

## 1.6.3 Exceptions al permissions

You may only deviate from the standards when explicitly permitted in these standards. These exceptional Permission can only may be granted or confirmed by your certification body.

(EC) 834/2007 Art. 27(7)(b)

### Changes to Farming and Growing standards

2.5.2 Permitted fertilisers, soil conditioners and nutrients		
	(EC) 889/2008 Art. 3(1); Annex I	
Name of product	Description, compositional requirements and conditions for use	
Farmyard manure (FYM)	<ul> <li>Non-organic manure must not be from factory farming origin (defined below) or contain GM ingredients.</li> <li>Liquid animal manure must undergo controlled fermentation and/or appropriate dilution before use.</li> </ul>	
	Guidance Preferably from Soil Association or EU organic certified systems and preferably composted.	

<sup>\*</sup>please note that this standard has been updated in all standards documents.

	You must retain information on the source, including the animal species and the husbandry system it comes from. We may request labels of feed fed to the animals producing the manure at inspection.  If you use non-organic manure, the following sources meet this standard:  • Poultry manure and deep litter from the following egg producing systems:  • free range  • deep litter systems which have a maximum stocking density of 7 birds/ m²  • deep litter rearing systems which have a maximum stocking density of 20kg/m²  • Poultry manure and deep litter from free range, traditional free range and extensive indoor barn reared meat producing systems which have a maximum stocking density of 30kg/m²  • Manure from straw-based pig production systems, not including indoor tethered sow breeding units  • Manure from cattle systems where cattle have access to pasture for at least part of the year.  Animals from all these systems must be able to freely turn through 360° for the majority or all of their life-cycle and must not be kept permanently in the dark.  A directory of Soil Association certified composts can be found here using the search term 'composts'.
Name of product  Composted or fermented mixture of	<ul> <li>Description, compositional requirements and conditions for use</li> <li>Product obtained from source separated household waste, which has been submitted to</li> </ul>
household waste	composting or to anaerobic fermentation for biogas production.
	Only vegetable and animal household waste
	Only when produced in a closed and monitored collection system, accepted by the Member State
	The concentrations of heavy metals in mg/kg of dry matter must not exceed: cadmium: 0.7; copper: 70; nickel: 25; lead: 45; zinc: 200; mercury: 0.4; chromium (total): 70; chromium (VI): not detectable.
Peat	Use limited to horticulture (market gardening, floriculture, arboriculture, nursery stock)
Mushroom compost	This must be initially made from products permitted in this table.
Dejecta of worms (vermicompost) and insects	This must be initially made from products permitted in this table.
<u>Guano</u>	
Composted or fermented mixture of	Composts obtained from mixtures of vegetable matter which has been submitted to composting

vegetable matter	or to anaerobic fermentation for biogas production.
Biogas digestate containing animal by- products co-digested with material of plant or animal origin as listed in this table	<ul> <li>By-products of animal origin (including by-products from wild animals) of category 3 and digestive tract content of category 2 (categories 2 and 3 as defined in Regulation (EC) No 1069/2009 of the European Parliament and of the Council). Animal by-products must not be from factory farming origin. The processing must have been done in accordance with Commission Regulation (EC) No 142/2011.</li> <li>Not to be applied to edible parts of the crop.</li> <li>Guidance</li> <li>Biogas digestate has high nitrogen availability, so is only suitable for situations where nitrogen loss can be controlled, e.g. application in spring when the crop is actively growing.</li> </ul>
Products or by-products of animal origin as below:  Blood meal Hoof meal Horn meal Feather meal Bone meal or degelatinised bone meal Fish meal Meat meal Hair and 'chiquette' meal Wool Fur Hair Jairy products Hydrolysed proteins	<ul> <li>Hydrolysed proteins must not be applied on edible parts of the crop.</li> <li>For furs the maximum level of chromium (VI) must not be greater than: not detectable.</li> <li>Guidance</li> <li>You should use products sourced from organic or extensive farming systems where possible.</li> <li>The Soil Association will continue to review the use of animal products with the aim of permitting only animal products sourced from organic or extensive systems in the future. If you are aware of any research or developments in this area please contact a member of the Standards Team: consultation@soilassociation.org</li> <li>Non-animal based alternatives to these inputs, such as composts, farmyard manure or soft ground rock phosphate, may be suitable to treat your nutrient deficiency.</li> <li>Animal products typically have readily available nitrogen and are suitable only for situations where nitrogen loss can be controlled.</li> </ul>
Products and by-products of plant origin	For example, oilseed cake meal, cocoa husks, malt culms.
Hydrolysed proteins of plant origin Seaweeds and seaweed products	For products which have been through the following processes:         (i) physical processes including dehydration, freezing and grinding,         (ii) extraction with water or aqueous acid and/or alkaline solution, or         (iii) fermentation

Name of product	Description, compositional requirements and conditions for use		
Sawdust and wood chips, composted bark and wood ash	The wood must not have been chemically treated after felling.		
Leonardite	Raw organic sediment rich in humic acids.		
	Only if it is obtained as a by-product of mining activities.		
Organic rich sediment from fresh water bodies formed under exclusion of oxygen	<ul> <li>Only organic sediments that are by-products of fresh water body management or extracted from former freshwater areas.</li> </ul>		
(e.g. sapropel)	When applicable, extraction methods should cause minimal impact on the aquatic system.		
	<ul> <li>Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants and petrol-like substances.</li> </ul>		
	• The concentrations of heavy metals in mg/kg of dry matter must not exceed: cadmium: 0.7; copper: 70; nickel: 25; lead: 45; zinc: 200; mercury: 0.4; chromium (total): 70; chromium (VI): not detectable.		
Chitin	The polysaccharide obtained from the shell of crustaceans.		
	<ul> <li>Only if obtained from organic aquaculture or sustainable fisheries, as defined in Article 3e of <u>Council Regulation (EC) No 2371/2002</u>.</li> </ul>		
Soft ground rock phosphate	Product as specified in point 7 of Annex 1 A.2 of <u>Regulation (EC) No 2003/2003</u> .		
	• The cadmium content must be less than or equal to 90 mg/kg of $P_2O_5$		
Aluminium-calcium phosphate	<ul> <li>Product as specified in point 6 of Annex I A.2. of <u>Regulation (EC) No 2003/2003</u>.</li> </ul>		
	• The cadmium content must be less than or equal to 90 mg/kg of $P_2O_{5.}$		
	Use only allowed where the soil pH is greater than 7.5.		
Basic slag	<ul> <li>Products as specified in point 1 of Annex I A.2 of <u>Regulation (EC) No 2003/2003</u>.</li> </ul>		
Crude potassium salt or kainit	<ul> <li>Products as specified in point 1 of Annex I A.3 of <u>Regulation (EC) No 2003/2003</u>.</li> </ul>		
Potassium sulphate, possibly containing magnesium salt	Product obtained from crude potassium salt by a physical extraction process, possibly containing magnesium salts.		
Stillage and stillage extract	Ammonium stillage excluded.		
Calcium carbonate	Only of natural origin, for example chalk, marl, ground limestone, Breton ameliorant, phosphate chalk.		
Mollusc waste	• Only from sustainable fisheries, as defined in Article 4 (1) (7) of Regulation (EU) No 1380/2013 or organic aquaculture		
	Guidance		
	You should also comply with Animal By-Product Regulations, for example in the UK.		

Egg shells	Must not be of factory farming origin.	
	Guidance	
	You should also comply with Animal By-Product Regulations, for example in the UK.	
Magnesium and calcium carbonate	Only of natural origin, for example magnesium chalk, ground magnesium, limestone.	
Magnesium sulphate	Only of natural origin, for example kieserite.	
Name of product	Description, compositional requirements and conditions for use	
Calcium chloride solution	Foliar treatment of apple trees, after identification of a calcium deficiency	
Calcium sulphate (gypsum)	Only of natural origin.	
	<ul> <li>Products as specified in point 1 of Annex I D of Regulation (EC) No 2003/2003.</li> </ul>	
Industrial lime	Only as a by-product of sugar production from sugar beet or sugar cane, or vacuum salt production from brine found in mountains.	
Elemental sulphur	Products as specified in Annex I D.3 of <u>Regulation (EC) No 2003/2003</u> .	
Trace elements	Only the inorganic micronutrients listed in Annex I, part E of Regulation (EC) No 2003/2003.	
Sodium chloride	Only mined salt	
Stone meal and clays	For example ground basalt, bentonite, perlite and vermiculite.	
Humic and fulvic acids	Only if obtained by inorganic salts/solutions excluding ammonium salts; or obtained from	
	drinking water purification.	
Xylite	Only if obtained as a by-product of mining activities (e.g. by-product of brown coal mining).	
Biochar	• A pyrolysis product made from a wide variety of organic materials of plant origin and applied as a	
	soil conditioner.	
	<ul> <li>Only from plant materials, untreated or treated with products listed in standard 2.6.3.</li> </ul>	
	• Maximum value of 4 mg polycyclic aromatic hydro-carbons (PAHs) per kg dry matter (DM).	

# 2.6.3. Permitted pesticides and plant protection products

All substances listed in this table must comply at least with the conditions for use as specified in the Annex of Commission Implementing Regulation (EU) No 540/2011. More restrictive conditions for use for organic production are specified in the second column of the table.

(EC) 834/2007 Art. 16(1)(a)

	(EC) 889/2008 Annex II
Name of product	Description, compositional requirements, conditions for use
Substances of plant or animal origin	

Allium sativum (Garlic extract)	
Azadirachtin extracted from Azadirachta indica (Neem tree)	
Beeswax	Only as pruning agent/wound protectant
COS-OGA	
Hydrolysed proteins excluding gelatine	
Laminarin	Kelp must be either grown organically according to standard 15.7.4 (Art. 6d) or harvested in a sustainable way according to standard 15.7.3 (Art. 6c) of the Soil Association seaweed standards.
<u>Maltodextrin</u>	
Pheromones	Only in traps and dispensers
Plant oils	All uses authorised, except herbicide.
Pyrethrins extracted from Chrysenthemum cinerariaefolium	Only from plant origin
Pyrethroids (only deltamethrin or lambdacyhalothrin)	Only in traps with specific attractants; only against <i>Bactrocera oleae</i> and <i>Geratitis capitata</i> Wied
Quassia extracted from <i>Quassia amara</i>	Only as an insecticide, repellent
Repellents by smell of animal or plant origin/sheep fat	Only on non-edible parts of the crop and where crop material is not ingested by sheep or goats
Salix spp. Cortex (aka willow bark extract)	
Terpenes (eugenol, geraniol and thymol)	
Basic substances	
Basic substances <u>based on food</u>	Only those basic substances within the meaning of Article 23(1) of <i>Regulation</i> (EC) No 1107/2009 that are covered by the definition of 'foodstuff' in Article 2 of Regulation (EC) No 178/2002 and have plant or animal origin.
	Substances not to be used as herbicides, but only for the control of pests and diseases.
	Basic substances are substances which are useful in plant protection, but are not predominantly used for this purpose. Many of them have traditionally been used in organic farming and include numerous foodstuffs of plant or animal origin. Substances that fall under this category are:  • Lecithins • Sucrose

	T.m. at a a
	Fructose
	Vinegar
	Whey
	Equisetum arvense L.
	Chitosan hydrochloride (Obtained from sustainable fisheries or organic)
	<u>aquaculture)</u>
	Calcium hydroxide
	• Quassia
	Sodium hydrogen carbonate
	Salix spp. Cortex
	Diammonium phosphate
	Garlic extract
	Contact your Certification Officer for more information
Name of product	Description, compositional requirements, conditions for use
Micro-organisms or substances produced by or derived	<u>l from</u> micro-organisms
Micro-organisms	Not from GMO origin
Spinosad	
<u>Cerevisane</u>	
Other substances	
Aluminium silicate (Kaolin)	
Calcium hydroxide	Fungicide, only in fruit trees, including nurseries, to control <i>Nectria galligena</i>
Carbon dioxide	
Copper compounds in the form of:	<del>Up to 6kg copper per ha per year</del>
copper hydroxide	<u> </u>
copper oxychloride	For perennial crops the 6kg copper limit may be exceeded in a given year
• copper oxide	provided that the average annual quantity actually used over a 5-year period
Bordeaux mixture	consisting of that and of the 4 preceding years does not exceed 6 kg per ha per
tribasic copper sulphate	<del>year.</del>
<u>Diammonium phosphate</u>	Only as attractant in traps
Ethylene	1

Fatty acids	All uses authorised, except herbicide
Ferric phosphate (iron (III) orthophosphate)	Preparations to be surface-spread between cultivated plants.
Hydrogen peroxide	
Kieselgur (diatomaceous earth)	
Lime sulphur (calcium polysulphide)	
Paraffin oil	
Potassium and sodium hydrogen carbonate (aka	
potassium/sodium bicarbonate)	
Pyrethroids (only deltamethrin or lambdacyhalothrin)	Only in traps with specific attractants; only against Bactrocera oleae and
	<u>Ceratitis capitata Wied</u>
Quartz sand	
Sodium chloride	All uses authorised, except herbicide
Sulphur	

## 3.4.1 Preventing disease and injury

Disease management must be based on preventative measures. You must draw up a health plan to show how you will build health and reduce disease. This must be tailored to suit your own farm and should allow you to minimise your use of veterinary medicines. Preventative measures include:

- a) breed and strain selection
- b) husbandry management practices
- c) high quality feed and exercise
- d) appropriate stocking density, and
- e) adequate and appropriate housing maintained in hygienic conditions.

(EC) 834/2007 Art. 5(e)(l); Art. 14(1)(e)(i) (EC) 889/2008 Art. 63(1)(b) You must be able to demonstrate that you take preventative measures to limit your animal health problems. If health problems occur you must review your management, take appropriate action and monitor its effectiveness.

Examples of preventative husbandry practices include:

- biosecurity measures
- grazing and range management
- stockmanship and welfare assessments
- breeding and culling management.

We strongly recommend that you consult with your vet on health planning and review where any improvements can be made annually.

Include details of the biosecurity measures you implement when bringing new or returning animals onto your farm and managing diseased stock. This could include isolation, blood testing, TB testing, buying from disease-free sources, direct sources, double fencing.

Include also the biosecurity measures you implement on your farm to limit the risk of specific diseases to your animals, such as restricting badger access to water troughs and feed, good manure management, and preventing disease transmission from neighbouring herds via shared equipment, brought-in manure or direct contact.

For more information on suitable measures refer to government advice and advisory services. For example, for bovine TB consult consult TB Hub or contact the TB Advisory Service for free farm visits and bespoke advice.

To reduce the risk of introducing disease you should avoid sourcing livestock from livestock markets and collection centres.

Pasture should be managed to minimise disease and parasite burdens. Frequent disease and parasite monitoring will help you to assess the effectiveness of your pasture management. The welfare of your animals will be assessed at inspection and this will be used to indicate the effectiveness of your preventative measures.

### 3.4.2 Quarantine

If you obtain livestock from non-organic units, special measures such as screening tests or quarantine periods may apply, depending on local circumstances.

(EC) 889/2008 Art. 23(3)

In your health plan, include details of the biosecurity measures you implement when bringing new or returning animals, including any organic animals, onto your farm and managing diseased stock.

This could include isolation, blood testing, TB testing, buying from disease free sources, direct sources, double fencing. For more information on suitable measures refer to government advice and the TB Advisory Service.

### 3.10.4 Feeding organic and in-conversion feed

- 1. The diet of your organic and converting animals must be based on organic feed composed of feedingstuffs obtained primarily from your holding or from other organic holdings in the same region.
- 2. You may feed or graze your organic or converting livestock:

In-conversion feed (as defined in standard 2.1.5a) is from land, which the crop was grown on, that has completed on year of conversion before harvesting the crop.

In conversion feed (as defined in standard 2.1.5a) is feed grown on land that had completed one year of conversion before the crop was harvested. This one year

- a) up to 100% in-conversion feed from your own holding and no more than 30% bought in in-conversion feed, forage or grazing from another holding.
- year conversion perennial forage crops and protein crops, only if they are produced from your own holding. The land you wish to use in this way must not have been part of any organic holding in the last five years.
- 3. When both in-conversion feed and first year conversion feed are being used, the total combined percentage used must not exceed the percentages in point a).
- 4. These percentages must be based on the annual dry matter intake of feedstuffs of plant origin.

(EC) 834/2007 Art. 5(k); Art. 14(1)(d)(i)(ii) (EC) 889/2008 Art. 21

of conversion can include any period recognised retrospectively as per standard 2.1.3.

b) up to 20% of the total average amount of feed can be first | Since 100% in-conversion (as defined in standard 2.1.5a) from your own holding is currently permitted under point 2. a), point 3. is effectively redundant.

Feed records

\*please note that this standard has been updated in Feed processing standards documents.

## 3.10.11 Use of additional products and substances in feed and feed supplements

- 1. You may only use the products and substances in standard 3.10.12 below if they are necessary to maintain animal health, welfare and vitality and to contribute to an appropriate diet which fulfils the physiological and behavioural needs of your animals, or if it is impossible to produce or preserve feed without them. Their use is subject to the specific conditions in the table.
- 2. Mineral feeds, vitamins, provitamins and trace elements must be of natural origin. If these substances are unavailable, chemically well-defined analogic substances may be authorised for use in organic production

(EC) 834/2007 Art. 14(d)(ii)(iv); Art. 16(2)(e)

You must be able to justify the use of additional feed products and substances. For example show:

- by forage or soil analysis that your home grown feeds are deficient, or
- with blood or tissue analysis, or details of previously identified deficiencies in your stock.

The products you use should target the nutritional needs as closely as possible and must be used in compliance with the conditions set in the table below.

Mineral licks must be free from additives and ingredients not permitted in these standards. Contact your Certification Officer for more information on using mineral and feed blocks.

Records of any feed supplements used

(EC) 889/2008 Art. 22 All products must also be authorised under Regulation (EC) 1831/2003.

1. The products in the table below may only be used if they are authorised for your intended use in your country.

(EC) 834/2007 Art. 16(1)

3.10.12 Products	and substances permitted for use in livestock	feed
	•	(EC) 834/2007 Art. 16(1)(c)(d)
		(EC) 889/2008 Art. 22; Annex V; Annex VI
Feed Material		
Product or substar	nce	Conditions of use
Organic feed materials of animal origin		There are restrictions on what animal by-products you can feed to different animal species. UK guidance is available <a href="here">here</a>
Non-organic feed materials of plant or animal origin, or fermentation (by-products) from micro-organisms, the cells of which have been inactivated or killed:  a) Saccharomyces cerevisiae b) Saccharomyces carlsbergensis		<ul> <li>must be produced or prepared without chemical solvents; and</li> <li>only used as part of the non-organic feed allowance in compliance with standards 3.10.7 and 3.10.9.</li> </ul>
<u>Minerals</u>		
Product or substan	<u>nce</u>	Conditions of use
Sodium	Sea salt Coarse rock salt Sodium chloride Sodium bicarbonate Sodium carbonate Sodium sulphate	
Potassium	Potassium chloride	
Calcium	Calcareous marine shells  Maerl Lithotamn Calcium gluconate Calcium carbonate	

<sup>\*</sup>please note that this standard has been updated in Feed processing standards documents.

Phosphorus	Defluorinated monocalciumphosphate Defluorinated dicalciumphosphate Monosodium phosphate Calcium magnesium phosphate Calcium sodium phosphate Monosodium phosphate		
Magnesium	Magnesium oxide (anhydrous magnesia) Magnesium sulphate Magnesium chloride Magnesium carbonate Magnesium phosphate		
Preservatives			
<b>Functional Group</b>	<u>Product or substance</u>	Conditions of use	
E 200	Sorbic acid		
E 236	Formic acid		
E 237	Sodium formate		
E 260	Acetic acid		
E 270	Lactic acid		
E 280	Propionic acid		
E 330	Citric acid		
Antioxidants			
ID no. or Functional Group	Product or substance	Conditions of use	
1b306(i)	Tocopherol <del>rich</del> extracts <del>of natural origin</del> from vegetable oils		
1b306(ii)	Tocopherol-rich extracts from vegetable oils (delta rich)		
Binders and anti-caking ago	Binders and anti-caking agents		
ID no. or Functional Group	Product or substance	Conditions of use	
<u>E412</u>	<u>Guar gum</u>		

E 535	Sodium ferrocyanide	Maximum dose rate of 20 mg/kg NaCl calculated as ferrocyanide anion
E 551b	Colloidal silica	
E 551c	Kieselguhr (diatomaceous earth, purified)	
1m558i	Bentonite	
E 559	Kaolinitic clays, free of asbestos	
E 560	Natural mixtures of stearites and chlorite	
E 561	Vermiculite	
E 562	Sepiolite	
E 566	Natrolite-Phonolite	
1g568	Clinoptilolite of sedimentary origin	
E 599	Perlite	
Silage additives		
ID no.	Product or substance	Conditions of use
1k Enzymes and micro-	Enzymes and micro-organisms	Use restricted to production of silage when weather conditions do not
<del>organisms</del>		allow for adequate fermentation.
<u>1k236</u>	Formic acid	The use of formic, propionic acid and their sodium salts in the
<u>1k237</u>	Sodium formate	production of silage shall only be permitted when weather conditions
<u>1k280</u>	Propionic acid	do not allow for adequate fermentation.
<u>1k281</u>	Sodium propionate	
Sensory additives		
ID no.	Product or substance	Conditions of use
2b Flavouring compounds	Flavouring compounds	Only extracts from agricultural products
	Castanea sativa Mill.: Chestnut extract	
Nutritional additives		
ID no.	Product or substance	Conditions of use
3a <del>Vitamins and</del>	Vitamins and provitamins	Only if derived from agricultural products, or
provitamins		If synthetic vitamins are used only those identical to vitamins derived from agricultural products may be used for monogastric and aquaculture animals

<u>3a920</u>	Betaine anhydrous	Only synthetic vitamins A, D and E if identical to vitamins derived from agricultural products may be used for ruminants. Their use is subject to approval by the Member State. If you want to make use of this provision, you must justify why you need to use these vitamins. In the UK this must be approved by the competent authority.  • Only for monogastric animals. • Only from natural origin and when available from organic origin.
Trace elements		
ID no. or Functional Group ID number	Product or substance	Conditions of use
E1 Iron	ferric oxide ferrous carbonate ferrous sulphate, heptahydrate ferrous sulphate, monohydrate	
<u>3b101</u>	Iron(II) carbonate (siderite)	
<u>3b103</u>	Iron(II) sulphate monohydrate	
<u>3b104</u>	<u>Iron(II) sulphate heptahydrate</u>	
3b201	Potassium iodide	
3b202	Calcium iodate, anhydrous	
3b203	Coated granulated calcium iodate anhydrous	
3b301	Cobalt(II) acetate tetrahydrate	
3b302	Cobalt(II) carbonate	
3b303	Cobalt(II) carbonate hydroxide (2:3) monohydrate	
3b304 3b305	Coated granulated cobalt(II) carbonate	

	Cobalt(II) sulphate heptahydrate	
3b402 E4 Copper	Copper(II) carbonate dihydroxy	
	<del>Basic cupric carbonate,</del>	
	monohydrate	
<u>3b404</u>	Copper (II) Cupric oxide	
<u>3b405</u>	Copper (II) Cupric sulphate, pentahydrate	
3b409	Dicopper chloride trihydroxide (TBCC)	
3b502 E5 Manganese	manganous carbonate	
	Manganese (II) manganous oxide	
<u>3b503</u>	Manganous sulfate,	
7h 607 F6 7im a	monohydrate Zinc oxide	
3b603 E6 Zinc	zinc oxide zinc sulphate monohydrate	
	l <del>zine sutphate mononyurate</del>	
<u>3b604</u>	zinc sulphate heptahydrate	
<u>3b605</u>	Zinc sulphate monohydrate	
3b609	Zinc chloride hydroxide monohydrate (TBZC)	
3b701-E7 Molybdenum	Sodium molybdate <u>dihydrate</u>	
<del>3b801</del> E8 Selenium	Sodium selenite	
	<del>Sodium selenate</del>	
71 0 4 0 71 0 44 71 0 4 2 71 0 4 7		
3b8.10, 3b8.11, 3b8.12, 3b813 and 3b817	Selenised yeast inactivated	
Product or substance		Conditions of use
Zootechnical additives		Conditions of use
ID no. or Functional	Product or substance	Conditions of use
Group	1 TOURCE OF SUBStAFFICE	Contactions of use

4a, 4b, 4c and 4d	Enzymes and micro-organisms in the category of "Zootechnical additives"	
Product or substance	•	Conditions of use
Products from sustainable fisheries,		<ul> <li>only when they are produced without chemical solvents</li> <li>their use is restricted to non-herbivores</li> <li>the use of fish protein hydrolysate is restricted solely to young animals</li> </ul>
		Guidance
		The source must be independently certified as sustainable, such as by the Marine Stewardship Council.
Non-organic spices, herbs and molasses provided that:		<ul> <li>only when organic is not available</li> <li>must be produced or prepared without chemical solvents, and</li> <li>use is limited to 1% of the feed ration of a given species calculated as a percentage of the dry matter of feed from agricultural origin</li> </ul>
		Guidance
		If you use non-organic spices, herbs or molasses you must demonstrate that the organic form is not available.

<sup>\*</sup>please note that this standard has been updated in Feed processing standards documents.

# Changes to Food and Drink Standards

6.2.2 Fruit and vegetable washes  You may wash fruit and vegetables in fresh water or using a fresh produce wash, provided the ingredients used in the wash are listed in the processing aids or additives sections of	See 6.4 for the list of permitted additives and 6.5 for permitted processing aids. List any fruit or vegetable washes you wish to use in your SIPS/MIPS forms. They will need to be approved by us before you use them.
these standards. (EC) 889/2008 Art. 27(1)(a)e); Annex VIII	Depending on the ingredients in the washes, we may ask you for additional information, such as a GM declaration from the wash manufacturer.
	Potable water (water of drinking quality), can be used to wash produce. You will need to demonstrate that the water you use is potable. Potable water is defined by

the EU Drinking Water Directive (98/83/EC). In the UK, this is transposed into The Water Supply (Water Quality) Regulations 2016.

There are a number of different processes and chemicals that can be used to treat water to bring it to drinking quality, <u>e.g. chlorine</u>, <u>chlorine dioxide and ozone</u>, these are applied to mains water treated by water companies as well as private water sources such as boreholes and springs. <u>This drinking water (potable water)</u>, <u>can be used to wash organic product.</u>

Substances such as chlorine and, chlorine dioxide and ozone are not permitted for use on organic product ion or processing (please see the list of permitted additives and processing aids for those which you are allowed to use). which means that Water with enhanced chlorine levels (i.e. above those used to produce drinking water permitted in potable water) cannot be used to wash organic producte.

In addition to water used to wash produce, any water used during the grading process must be potable.

### **6.4.1 Permitted additives**

You may only use the additives in the table below in organic foods and according to the specific conditions against them.

Additives marked with an asterisk (\*) must be included in the calculation of agricultural ingredients in order to determine the organic percentage of the product overall.

(EC) 889/2008 Annex VIII A

See the glossary for the definition of a food additive.

Some additives are a potential GM risk because they are derived from crops that can be GM or are made using processes that sometimes involve GM. For these additives you will need to provide additional proof that they are non-GM by completing a non-GM declaration form, signed by the additive manufacturer, and providing supporting information. The type of supporting information required will depend on the additive.

If you need to use a non-organic additive or processing aid in your product, please contact your Certification Officer to discuss what will be required.

E no.	Name	Preparation of foodstuffs of plant origin	Preparation of foodstuffs of animal origin	Specific conditions
E153	Vegetable carbon		X	Only in Ashy goat cheese and Morbier cheese.
E160b	Annatto*, bixin* & norbixin*		X	Only in Red Leicester, Double Gloucester, Cheddar and Mimolette cheeses.
E170	Calcium Carbonate	X	X	May be used in any product, except for colouring or calcium enrichment.
E220	Sulphur dioxide	X	X (Only for mead)	In fruit wines <sup>3</sup> without added sugar (including cider and perry) or in mead: 100mg <sup>4</sup>
E224	Potassium metabisulphite	X	X (Only for mead)	In cider and perry produced with addition of sugars or juice concentrate after fermentation: 100mg/l <sup>4</sup>
E223	Sodium metabisulphite		X	Crustaceans <sup>2</sup> .
E250	Sodium nitrite		X	For curing meat only <sup>1</sup> . The ingoing amount expressed as NaNO <sub>2</sub> must not exceed 80mg/kg and the residual amount expressed as NaNO <sub>2</sub> must not exceed 50mg/kg.
E252	Potassium nitrate (saltpetre)		X	For curing meat only <sup>1</sup> . The ingoing amount expressed as NaNO <sub>3</sub> must not exceed 80mg/kg and the residual amount expressed as NaNO <sub>3</sub> must not exceed 50mg/kg.
E270	Lactic acid	Х	X	
E290	Carbon dioxide	Х	Х	
E296	Malic acid	Х		
E300	Ascorbic acid	Х	Х	For meat products <sup>2</sup> .
E301	Sodium ascorbate		Х	For use with nitrites or nitrates in meat products <sup>2</sup> .
E306	Tocopherol rich extract (Vit E)*	X	X	As an antioxidant.
E322	Lecithins*	X	Х	For milk products <sup>2</sup> .  Only when derived from organic raw material <sup>5</sup> . Must be organic from January 1st 2022. Until that date, only when derived from organic raw material
E325	Sodium lactate		X	For milk-based and meat products.
E330	Citric acid	X	Х	
E331	Sodium citrates	X	Х	

E333	Calcium citrates	Х		
E334	Tartaric acid (L(+)-)	X	X (only for mead)	
E335	Sodium tartrates	X		
E336	Potassium tartrates	X		
E341 (i)	Monocalcium Phosphate	X		As a raising agent for self-raising flour
E392	Extracts of rosemary*	X	X	Only in organic form
E400	Alginic acid	X	X	For milk-based products <sup>2</sup>
E401	Sodium alginate	X	X	For milk-based products <sup>2</sup>
E402	Potassium alginate	X	X	For milk-based products <sup>2</sup>
E406	Agar	X	X	For milk-based and meat products <sup>2</sup>
E407	Carrageenan	X	X	For milk-based products <sup>2</sup>
E410	Locust bean gum*	X	X	Must be organic from January 1st 2022
E412	Guar gum*	X	X	Must be organic from January 1st 2022
E414	Arabic gum*	X	X	Must be organic from January 1st 2022
E415	Xanthan gum	X	X	
<u>E417</u>	Tara gum powder	<u>X</u>	<u>X</u>	As a thickener. Must be organic from January 1st 2022
E418	Gellan gum	X	X	High-acyl form only. Must be organic from January 1st 2022
E422	Glycerol	X		From plant origin
				For plant extracts and flavourings extracts, flavourings, humectant in
				gel capsules and as a surface coating of tablets. Must be organic from
				<u>January 1<sup>st</sup> 2022</u>
E440 (i)	Pectin* (non amidated)	X	X	For milk-based products <sup>2</sup>
E464	Hydroxypropyl methyl cellulose	X	X	As an encapsulation material for capsules
E500	Sodium carbonate	X	X	
E501	Potassium Carbonates	X		
E503	Ammonium Carbonates	X		
E504	Magnesium carbonates	X		
E509	Calcium chloride		X	For milk coagulation
E516	Calcium sulphate	X		As a carrier
E524	Sodium hydroxide	X		Surface treatment of Laugengebäck (a type of traditional German
				pastry) and regulation of acidity in organic flavourings
E551	Silicon dioxide gel or	X	X	For herbs and spices in dried powdered form

	colloidal solution			Flavourings and propolis
E553b	Talc	X	X	As a coating agent for meat products
E901	Beeswax	X		As a glazing agent for confectionary only
				Beeswax from organic beekeeping
E903	Carnauba wax	X		As a glazing agent for confectionary <del>only</del>
				As a mitigating method for mandatory extreme cold treatment of
				fruit as a quarantine measure against harmful organisms
				Only when derived from organic material. Must be organic from
				January 1st 2022. Until that date, only when derived from organic
				raw material
E938	Argon	X	X	
E939	Helium	X	X	
E941	Nitrogen	X	X	
E948	Oxygen	X	X	
E968	Erythritol	X	X	Only when derived from organic production without using ion
	-			exchange technology.

#### **Notes**

## **6.5.1 Permitted processing aids**

You may only use the processing aids in the table below. Many have specific conditions against them. You may only use a processing aid in line with the specific condition for its use.

(EC) 889/2008 Art. 27(1)(a)(b); Annex VIII B

See the glossary for the definition of a processing aid.

An example of a processing aid is vegetable oil applied to bread tins as a release agent. This has a function during baking to help get the bread out of tin but does not have a function in the final product, although residues may remain.

Conversely vegetable oil added to raisins to prevent them sticking together is not a processing aid as it is designed to have a function in the finished product. It must be declared as an ingredient.

<sup>&</sup>lt;sup>1</sup>E250 sodium nitrite and E252 potassium nitrate can only be used if it has been demonstrated to the satisfaction of the competent authority that no technological alternative, giving the same guarantees and/or allowing maintenance of the specific features of the product, is available.

<sup>&</sup>lt;sup>2</sup>The restriction only relates to animal products

<sup>&</sup>lt;sup>3</sup> In this context, 'fruit wine' is defined as wine made from fruits other than grapes (including cider and perry).

<sup>&</sup>lt;sup>4</sup> Maximum levels available from all sources, expressed as SO<sub>2</sub> in mg/l.

Some processing aids are a potential GM risk because they are derived from crops that can be GM or are made using processes that sometimes involve GM. For these processing aids you will need to provide additional proof that they are non-GM by completing our non-GM declaration form, signed by the processing aid manufacturer, and providing supporting information. The type of supporting information required will depend on the processing aid.

If a processing aid is not listed in the table below then you cannot use it.

Processing aid name	Preparation of	Preparation of	Specific conditions
	foodstuffs of	foodstuffs of	
	plant origin	animal origin	
Water	Х	X	Drinking water within the meaning of Council Directive 98/83/EC
Calcium chloride	Х		Coagulation agent
Calcium carbonate	X		
Calcium hydroxide	X		
Calcium sulphate	X		Coagulation agent
Magnesium chloride (or nigari)	X		Coagulation agent
Potassium carbonate	X		Drying of grapes
Sodium carbonate	X	X	
Lactic acid		X	For the regulation of the pH of the brine bath in cheese production <sup>1</sup>
L(+)lactic acid from fermentation	<u>X</u>		For the preparation of plant protein extracts
Citric acid	Х	X	
			Sugar production
Sodium hydroxide			Oil production excluding olive oil production
	X		For the preparation of plant protein extracts
			Gelatine production <sup>1</sup>
Sulphuric acid	X	X	Sugar production <sup>2</sup>
			Only for antimicrobial purposes in production of sugar <sup>2</sup>
<u>Hop extract</u>	<u>X</u>		From organic production, when available
			Only for antimicrobial purposes in production of sugar. <sup>2</sup>
Pine rosin extract	<u>X</u>		From organic production when available
			Gelatine production and for the regulation of the pH of the brine bath
			in the processing of Gouda, Edam and Maasdammer cheeses,
Hydrochloric acid		X	Boerenkaas, Friese and Leidse Nagelkaas

Ammonium hydroxide		X	Gelatine production
Hydrogen peroxide		X	Gelatine production
Carbon dioxide	Х	X	
Nitrogen	Х	X	
Ethanol	X	X	Solvent
Tannic acid	X		Filtration aid
Egg white albumen	X		
Casein	X		
Gelatin	X		
Isinglass	X		
Vegetable oils	X	х	Greasing, releasing or anti-foaming agent. Only when derived from organic production
Silicon dioxide gel or colloidal			
solution	X		
Activated carbon	X		
Talc	X		In compliance with the specific purity criteria for food additive E553b
Bentonite	X	X	Sticking agent for mead <sup>1</sup>
Cellulose	X	X	Gelatine production <sup>1</sup>
Diatomaceous earth	Х	X	Gelatine production <sup>1</sup>
Perlite	X	X	Gelatine production <sup>1</sup>
Hazelnut shells	X		
Rice meal	X		
Beeswax	X		Releasing agent. Only when derived from organic beekeeping
Carnauba wax	X		Releasing agent.  Only when derived from organic raw material. Must be organic from January 1st 2022. Until that date, only when derived from organic raw material.
Acetic acid/vinegar		X	Only when derived from organic production. For fish processing only.  Ffrom biotechnological source natural fermentation, except if not to be produced by or from GMO.
Thiamin hydrochloride	Х	X	Only for use in processing fruit wines, including cider, perry and mead
Diammonium phosphate	Х	X	Only for use in processing fruit wines, including cider, perry and mead

Wood fibre	X	X	The source of timber should be restricted to certified, sustainably harvested wood. Wood used must not contain toxic components (post-harvest treatment, naturally occurring toxins or toxins from micro-organisms)	
<sup>1</sup> The restriction only concerns animal products				
<sup>2</sup> The restriction only concerns plant products				

## 6.9.3 Additives and processing aids

You may use the products and substances listed in the table below for making wine. You must cross reference this with *EC Regulation 1234/2007* and the specific conditions and limits of application listed in Annex I A of *EC Regulation 606/2009*.

(EC) 889/2008 Art. 29(c)(2)(3); Annex VIIIa (EC) 606/2009 Annex Ia It is important to note that the wine regulation 606/2009 details further specific conditions and restrictions on using the materials outlined in the table below. You will need to make sure that you also meet these requirements.

Some additives and processing aids are a potential GM risk because they are derived from crops that can be GM or are made using processes that sometimes involve GM. For these additives and processing aids you will need to provide additional proof that they are non-GM by completing a non-GM declaration form, signed by the additive or processing aid manufacturer, and providing supporting information. The type of supporting information required will depend on the additive or processing aid.

Please refer to this guidance document for more information.

Product/ Substance	Oenological practice	Specific conditions and restrictions within the limits and conditions set out in Regulation (EC) 1234/2007 and Regulation (EC) 606/2009
Air Gaseous oxygen	For aeration or oxygenation	
Perlite Cellulose Diatomaceous earth	Centrifuging & filtration	To use only as inert filtering agents.
Nitrogen Carbon dioxide Argon	To create an inert atmosphere and to handle the product shielded from the air	
Yeasts <u>, yeast cell walls</u>	Use	Individual strains organically sourced if available.

Product/ Substance	Oenological practice	Specific conditions and restrictions within the limits and conditions set out in Regulation (EC) 1234/2007 and Regulation (EC) 606/2009
Diammonium phosphate Thiamine hydrochloride Inactivated yeast, aAutolysates of yeast and yeast hulls	Use	
Sulphur dioxide Potassium bisulphite or potassium metabisulphite	Use	See standards 6.9.4 and 6.9.5 for permitted levels.
Charcoal for oenological use	Use	
Edible gelatin Plant proteins from wheat or peas Isinglass Egg white albumin Tannins Potato proteins Yeast protein extracts	Clarification	From organic raw material if available.
Casein Chitosan derived from Aspergillus niger Potassium caseinate Silicon dioxide Bentonite Pectolytic enzymes	Clarification	
Lactic acid L(+)Tartaric acid	Acidification	
L(+)Tartaric acid Calcium carbonate Neutral potassium tartrate Potassium bicarbonate	Deacidification	
Aleppo pine resin	Addition	
Lactic bacteria	Use	
<b>Product/ Substance</b>	Oenological practice	Specific conditions and restrictions within the

		limits and conditions set out in Regulation (EC) 1234/2007 and Regulation (EC) 606/2009
L-Ascorbic acid	Addition	
Nitrogen	Bubbling	
Carbon dioxide	Addition	
Citric acid	Wine stabilization	
Tannins	Addition	From organic raw material if available.
Meta-tartaric acid	Addition	For partially fermented wines for direct human consumption as such, and the products defined in paragraphs 1, 3, 4, 5, 6, 7, 8, 9, 15 and 16 of Annex IV of EC Regulation 479/2008. No more than 100mg/l.
Acacia gum (gum Arabic)	Use	From organic raw material if available.
Potassium bitartrate	Use	
Cupric citrate	Use	
Yeast mannoproteins	Use	
Oak chips	Use	
Potassium alginate	Use	
Chitosan derived from Aspergillus niger	Use	
Calcium sulphate	Treatment in accordance with Annex III A (2)(b) to <i>EC Regulation 606/2009</i>	Only for 'vino generoso' or 'vino generoso de licor'.

### Changes to Abattoir and slaughtering standards

### **18.7.4 Livestock movement records**

When you receive animals in you must record:

- a) species, source, numbers,
- b) organic status,
- c) identification mark,
- d) age,
- e) time and date of arrival.

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Soil Association Certification licensed farms must supply an 'organic livestock movement to slaughter' form or an equivalent delivery document with each batch of animals delivered which contains the relevant information.

(EC) 889/2008 Art. 76(a)(b)

Non-SA Certification licensed farms do **not** have to use these forms, in which case you must check that each animal is listed as organic on the delivery note. You must also check that all other legally required transfer documents have been completed.

## **Summary of key statutory welfare requirements**



Along with the organic record keeping requirements you will also need to keep records to comply with EC Regulation 1099/2009. These include:

### Equipment maintenance records

A maintenance record for all restraining and stunning equipment must be kept and the records retained for at least one year.

(EC) 1099/2009 Art. 9(1)

### Records of remedial actions taken to improve animal welfare

For slaughterhouses slaughtering 1,000 or more livestock units of mammals or 150,000 birds or rabbits per year the animal welfare officer must keep a record of the action taken to improve animal welfare in the slaughterhouse in which he/she carries out his/her tasks. This record must be kept for at least one year.

(EC) 1099/2009 Art. 17(5)

### Gas stunning equipment records\*

Gas stunning equipment must measure continuously, display and record the gas concentration and length of exposure. It must be clearly visible to the operator of the equipment and give a visual and audible warning if the concentration of gas falls below the required level. These records must be kept for at least one year.

(EC) 1099/2009 Annex II, Art. 6(2)

### Electrical stunning equipment records\*

All electrical stunning equipment must be fitted with an instrument which displays and records the details of key electrical parameters for each animal stunned. The instrument must be clearly visible to the operator of the equipment and give a visual and audible warning if the duration of exposure falls below the required level. These records shall be kept for at least one year. The regulation also requires all electrical stunning equipment (except waterbath stunning equipment) to record the details of key electrical parameters.

(EC) 1099/2009 Annex II, Art. 4(1)

\*Operators have until Effective from 8 December 2019, operators must have to installed equipment capable of recording and storing the required data. This is unless prior to that date operators have made changes to the layout of the slaughterhouse, engage in any construction or purchase new equipment, any or all which relate to either gas or electric stunning equipment.

### Waterbath stunning equipment records\*

Waterbath stunning equipment must be fitted with a device which displays and records the details of the electrical key parameters used. These records shall be kept for at least one year.

(EC) 1099/2009 Annex II, Art. 5(10)

## Changes to Aquaculture standards

### 13.8.1 Permitted feed minerals

You may use the following feed materials of mineral origin in organic aquaculture feeds:

- a) Calcareous marine shells
- b) Maerl
- c) Lithotamn
- d) Calcium gluconate
- e) Calcium carbonate
- f) Defluorinated monocalciumphosphate
- g) Defluorinated dicalciumphosphate
- h) Magnesium oxide (anhydrous magnesia)
- i) Magnesium sulphate
- j) Magnesium chloride
- k) Magnesium carbonate
- l) Calcium magnesium phosphate
- m) Magnesium phosphate
- n) Monosodium phosphate
- o) Calcium sodium phosphate
- p) Sodium chloride
- q) Sodium bicarbonate
- r) Sodium carbonate
- s) Sodium sulphate
- t) Potassium chloride

(EC) 834/2007 Art. 15d(iii, iv)

(EC) 889/2008 Art. 25m (1), Annex V (1)

\*please note that this standard has been updated in Feed processing standards documents.

## 13.8.2 Permitted feed additives

You may use the following feed additives or products in animal nutrition and processing aids:

(FC) 834/2007 Art 15d (iii iv)

		(EC) 834/2007 Art. 15d (111, 1V) (EC) 889/2008 Art. 25m (2), Annex VI
ID number <u>or Functional</u> <u>Group</u>	Substance	Descriptions/conditions of use
Preservatives		
E 200	Sorbic acid	
E 236	Formic acid	
E 237	Sodium formate	
E 260	Acetic acid	
E 270	Lactic acid	
E 280	Propionic acid	
E 330	Citric acid	
Antioxidants	•	
1b306(i)	Tocopherol <del>rich</del> extracts <del>of natural</del> <del>origin</del> from vegetable oils	
1b306(ii)	Tocopherol-rich extracts from vegetable oils (delta rich)	
Emulsifiers, stabilisers, thick	eners and gelling agents	
<b><u>E</u> <u>1c</u></b> 322	Lecithins	Only when derived from organic raw material. Use restricted to aquaculture animal feed.
Binders and anti-caking ager	nts	
<u>E412</u>	<u>Guar gum</u>	
E 535	Sodium ferrocyanide	Maximum dose rate of 20 mg/kg NaCl calculated as ferrocyanide anion
E 551b	Colloidal silica	
E 551c	Kieselguhr (diatomaceous earth, purified)	
1m558i	Bentonite	
E 559	Kaolinitic clays, free of asbestos	

E 560	Natural mixtures of stearites and chlorite	
E 561	Vermiculite	
E 562	Sepiolite	
E 566	Natrolite-Phonolite	
1g568	Clinoptilolite of sedimentary origin	
E 599	Perlite	
Sensory additives		
2b Flavouring compounds	Flavouring compounds	Only extracts from agricultural products
	Castanea sativa Mill.: Chestnut	
	<u>extract</u>	
<b>Nutritional additives</b>		
3a Vitamins and provitamins	Vitamins and provitamins	<ul> <li>Only if derived from agricultural products, or</li> <li>If synthetic vitamins are used only those identical to vitamins derived from agricultural products may be used for monogastric and aquaculture animals</li> </ul>
		Only synthetic vitamins A, D and E if identical to vitamins derived from agricultural products may be used for ruminants. Their use is subject to approval by the Member State. If you want to make use of this provision, you must justify why you need to use these vitamins. In the UK this must be approved by the competent authority.
Trace elements		
ID number <u>or Functional</u> Group	Substance	Conditions of use

E1 Iron	ferric oxide	
	ferrous carbonate	
	ferrous sulphate, heptahydrate	
<u>3b101</u>	ferrous sulphate, monohydrate	
<u>50101</u>	Iron(II) carbonate (siderite)	
<u>3b103</u>	itori(ii) carbonate (oracine)	
<u> </u>	Iron(II) sulphate monohydrate	
<u>3b104</u>	<u></u>	
<u> </u>	Iron(II) sulphate heptahydrate	
3b201	Potassium iodide	
	1 ottobram rounde	
3b202	Calcium iodate, anhydrous	
	Caterani rodate, anny arodo	
3b203	Coated granulated calcium iodate	
	anhydrous	
3b301	Cobalt(II) acetate tetrahydrate	
3b302	Cobalt(II) carbonate	
	00.00.11(=2, 00.2.002.10.10	
3b303	Cobalt(II) carbonate hydroxide (2:3)	
	monohydrate	
	<b>,</b>	
3b304	Coated granulated cobalt(II)	
3b305	carbonate	
	Cobalt(II) sulphate heptahydrate	
3b402 E4 Copper	Copper(II) carbonate dihydroxy	
	Basic cupric carbonate,	
	monohydrate	
3b404	Copper (II) Cupric oxide	
_	· · ·	
<u>3b405</u>	Copper (II) Cupric sulphate,	
	pentahydrate	
3b409	]	

	Dicopper chloride trihydroxide (TBCC)	
3b502 E5 Manganese	manganous carbonate <u>Manganese (II</u> ) <del>manganous</del> oxide	
<u>3b503</u>	Manganous sulfate, monohydrate	
3b603 <u>E6 Zinc</u>	Zinc oxide zinc sulphate monohydrate	
<u>3b604</u>	zinc sulphate heptahydrate	
<u>3b605</u>	Zinc sulphate monohydrate	
3b609	Zinc chloride hydroxide monohydrate (TBZC)	
3b701 E7 Molybdenum	Sodium molybdate <u>dihydrate</u>	
3b801E8 Selenium	Sodium selenite Sodium selenate	
3b8.10, 3b8.11, 3b8.12, 3b813 and 3b817	Selenised yeast inactivated	
Zootechnical additives		
4a, 4b, 4c and 4d	Enzymes and micro-organisms in the category of "Zootechnical additives"	

<sup>\*</sup>please note that this standard has been updated in Feed processing standards documents.

Annex I — fertilisers and nutrients The following substances can only be used for fish in inland waters as described in standard 13.4.8.	
Name - Compound products or products containing only materials listed hereunder	Description, compositional requirements, conditions for use
Mushroom culture wastes	This must be initially made from products permitted in this table.
Composted or fermented mixture of vegetable matter	Composts obtained from mixtures of vegetable matter which has been submitted to composting or to anaerobic fermentation for biogas production.
Products and by-products of plant origin for fertilisers	Examples: oilseed cake meal, cocoa husks, malt culms
Hydrolysed proteins of plant origin	
Seaweeds and seaweed products	As far as directly obtained by: (i) physical processes including dehydration, freezing and grinding (ii) extraction with water or aqueous acid and/or alkaline solution (iii) fermentation
Sawdust and wood chips, composted bark and wood ash	The wood must not have been chemically treated after felling.
Soft ground rock phosphate	Product as specified in point 7 of Annex 1 A.2 of Regulation (EC) No $2003/2003$ .  The cadmium content must be less than or equal to 90 mg/kg of $P_2O_5$
Aluminium-calcium phosphate	Product as specified in point 6 of Annex I A.2. of <u>Regulation (EC) No 2003/2003</u> . The cadmium content must be less than or equal to 90 mg/kg of $P_2O_5$ . Use only allowed where the soil pH is greater than 7.5.
Basic slag	Products as specified in point 1 of Annex I A.2 of <u>Regulation (EC) No</u> 2003/2003.
Crude potassium salt or kainit	Products as specified in point 1 of Annex I A.3 of Regulation (EC) No 2003/2003.
Potassium sulphate, possibly containing magnesium salt	Product obtained from crude potassium salt by a physical extraction process, possibly containing magnesium salts.
Stillage and stillage extract	Ammonium stillage excluded.
Calcium carbonate	Only of natural origin, for example chalk, marl, ground limestone, Breton ameliorant, phosphate chalk.

Mollusc waste	Only from sustainable fisheries, as defined in Article 4 (1) (7) of Regulation (EU) No 1380/2013 or organic aquaculture
Egg shells	Must not be of factory farming origin.
Magnesium and calcium carbonate	Only of natural origin e.g. magnesian chalk, ground magnesium, limestone
Magnesium sulphate (kieserite)	Only of natural origin
Calcium <u>sulphate (gypsum)</u> <del>chloride solution</del>	Only of natural origin  Products as specified in point 1 of Annex I D of Regulation (EC) No 2003/2003.
Industrial lime	Only as a by-product of sugar production from sugar beet or sugar cane, or vacuum salt production from brine found in mountains.
Elemental sulphur	Products as specified in Annex I D.3 of <u>Regulation (EC) No 2003/2003</u> .
Trace elements	Only the inorganic micronutrients listed in Annex I, part E of Regulation (EC) No 2003/2003.
Sodium chloride	Only mined salt
Stone meal and clays	For example, ground basalt, bentonite, perlite and vermiculite.
Leonardite (Raw organic sediment rich in humic acids)	Only if obtained as a by-product of mining activities
Organic rich sediment from fresh water bodies formed under exclusion of oxygen (e.g. sapropel)	Only organic sediments that are by-products of fresh water body management or extracted from former freshwater areas.  When applicable, extraction should be done in a way to cause minimal impact on the aquatic system.  Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants and petrol-like substances.  Maximum concentrations in mg/kg of dry matter must not exceed: cadmium: 0,7; copper: 70; nickel: 25; lead: 45; zinc: 200; mercury: 0,4; chromium (total): 70; chromium (VI): not detectable
Xylite	Only if obtained as a by-product of mining activities (e.g. by-product of brown coal mining).

Annex I — fertilisers and nutrients The following substances can be used in seaweed cultivation on land using external nutrient sources in line with standard 15.7.4.	
Name - Compound products or products containing only materials listed hereunder	Description, compositional requirements, conditions for use
Mushroom culture wastes	This must be initially made from products permitted in this table.
Composted or fermented mixture of vegetable matter	Composts obtained from mixtures of vegetable matter which has been submitted to composting or to anaerobic fermentation for biogas production.
Products and by-products of plant origin for fertilisers	Examples: oilseed cake meal, cocoa husks, malt culms
<u>Hydrolysed proteins of plant origin</u>	
Seaweeds and seaweed products	As far as directly obtained by: (i) physical processes including dehydration, freezing and grinding (ii) extraction with water or aqueous acid and/or alkaline solution (iii) fermentation
Sawdust and wood chips, composted bark and wood ash	The wood must not have been chemically treated after felling.
Soft ground rock phosphate	Product as specified in point 7 of Annex 1 A.2 of <u>Regulation (EC) No 2003/2003</u> .  The cadmium content must be less than or equal to 90 mg/kg of $P_2O_5$
Aluminium-calcium phosphate	Product as specified in point 6 of Annex I A.2. of <u>Regulation (EC) No 2003/2003</u> . The cadmium content must be less than or equal to 90 mg/kg of $P_2O_{5.}$ Use only allowed where the soil pH is greater than 7.5.
Basic slag	Products as specified in point 1 of Annex I A.2 of <u>Regulation (EC) No 2003/2003</u> .
Crude potassium salt or kainit	Products as specified in point 1 of Annex I A.3 of <u>Regulation (EC) No 2003/2003</u> .
Potassium sulphate, possibly containing magnesium salt	Product obtained from crude potassium salt by a physical extraction process, possibly containing magnesium salts.
Stillage and stillage extract	Ammonium stillage excluded.
Calcium carbonate	Only of natural origin, for example chalk, marl, ground limestone, Breton ameliorant, phosphate chalk.

Mollusc waste	Only from sustainable fisheries, as defined in Article 4 (1) (7) of Regulation (EU) No 1380/2013 or organic aquaculture
Egg shells	Must not be of factory farming origin.
Magnesium and calcium carbonate	Only of natural origin e.g. magnesian chalk, ground magnesium, limestone
Magnesium sulphate (kieserite)	Only of natural origin
Calcium <u>sulphate (gypsum)</u> <del>chloride solution</del>	Only of natural origin  Products as specified in point 1 of Annex I D of Regulation (EC) No 2003/2003.
Industrial lime	Only as a by-product of sugar production from sugar beet or sugar cane, or vacuum salt production from brine found in mountains.
Elemental sulphur	Products as specified in Annex I D.3 of Regulation (EC) No 2003/2003.
Trace elements	Only the inorganic micronutrients listed in Annex I, part E of Regulation (EC) No 2003/2003.
Sodium chloride	Only mined salt
Stone meal and clays	For example, ground basalt, bentonite, perlite and vermiculite.
Leonardite (Raw organic sediment rich in humic acids)	Only if obtained as a by-product of mining activities
Organic rich sediment from fresh water bodies formed under exclusion of oxygen (e.g. sapropel)	Only organic sediments that are by-products of fresh water body management or extracted from former freshwater areas.  When applicable, extraction should be done in a way to cause minimal impact on the aquatic system.  Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants and petrol-like substances.  Maximum concentrations in mg/kg of dry matter must not exceed: cadmium: 0,7; copper: 70; nickel: 25; lead: 45; zinc: 200; mercury: 0,4; chromium (total): 70; chromium (VI): not detectable
<u>Xylite</u>	Only if obtained as a by-product of mining activities (e.g. by-product of brown coal mining).