

Section 10

Permitted Ingredients for Processed Foods

10.0 Contents Page

This Section gives the text of the Regulation 2092/91, Annex VI as it relates to the use of processing aids, non-agricultural ingredients and non-organic ingredients in organic products, including the definitions and other EC Regulations referred to in the text.

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Revision Details

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1	1/3/2001	1 to 14	JL Dalby & T Green	C Peers (Board Chairman)
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3	31/10/2006	14	G Lanceley	R Jacobs (Chief Executive)

10.1 Organic Food Product Composition – Overview

10.1.01 OF&G GN	<p>In the organic sector, food ingredients are defined as agricultural or non-agricultural, additives or processing aids.</p> <p><u>Agricultural ingredients</u> are animal or vegetable ie they have been grown or raised. Only agricultural ingredients can be designated "organic". They include the cereals, meat, poultry, eggs, vegetables, fruits, oils (from oilseeds), herbs and spices.</p> <p><u>Non-agricultural ingredients</u> include water and minerals such as salt</p> <p><u>Food additives</u> include pectins, gums, acids and lecithins. They perform a function in a food eg thickening, stabilising or emulsifying.</p> <p><u>Processing aids</u> perform a function during the manufacture of the product but they do not have a function in the finished product eg calcium chloride helps coagulate cottage cheese, vegetable oils are used for greasing bread tins.</p> <p><u>Genetic modification</u> – no genetically modified organisms or products derived from them may be used in organic products.</p>
10.1.02 OF&G GN	<p>When making organic products, it's preferred that 100% of the agricultural ingredients are organic but <u>at least 95% must be</u>. The remaining 5% can only be from the list of approved non-organic agricultural products in section 10.5.</p> <p>Note 1 - In rare situations, a derogation may be given by Defra, where a particular ingredient is not available in organic form. See paragraph 10.5.04 below.</p> <p>Note 2 - There is also a class of products containing 70-95% organic ingredients. They can't be labelled 'organic' but can be labelled as containing a specified percentage of organic ingredients. See section 4.1.06.</p>
10.1.03 OF&G GN	<p><u>Non-agricultural ingredients</u> - can be used in any quantity, but must be from the approved list in section 10.3.</p> <p><u>Additives and processing aids</u> - can be used as required but must be from the approved lists in sections 10.3 and 10.4.</p> <p><u>Flavours</u> - must be natural.</p> <p><u>Stabilisers /thickeners</u> - Pectins and many different types of gum are approved (guar gum, xanthan gum, carrageenan, etc.)</p> <p><u>Emulsifiers</u> – lecithins (from eggs and soya) are the only approved emulsifiers.</p> <p><u>Colours</u> – not allowed (except for annatto for traditional English coloured cheeses). Fruit products or spice which give colour may be used, but colours per se are not allowed.</p> <p><u>Yeast, yoghurt, cheese cultures, etc.</u> – these don't have to be organic but must be non-GM.</p> <p><u>Fats and oils</u> – must be expelled, not solvent-extracted or hydrogenated.</p> <p><u>Starches</u> – must not be chemically modified.</p> <p><u>Salt</u> – conventional sources or sea salt can be used. Anti-caking agents (as found in salt used in the food processing industry) can be used if required, but it's preferred that they're not.</p> <p><u>Water</u> - Mains water (potable water) contains chlorine and may be used, but extra chlorine cannot be added. If borehole or well water is used, it can be chlorinated only to the same level as mains water.</p>

10.1 Organic Food Product Composition – Overview - continued

10.1.04 OF&G GN	Recipes should be written on a Multiple Ingredient Product Specification sheet (MIPS) (OF&G Record Sheet 42). No organic product will be licensed until the MIPS and label have been approved by the certification office.
10.1.05 OF&G GN	Food Safety – preservatives are not allowed in organic foods, so the shelf life may not be as long as for conventional products. It's very important that this is made clear on the label when new organic food products are developed.
10.1.06 OF&G GN	Statutory Legislation – in certain products, UK law requires that additives be used (eg enrichment agents for bread and flour, addition of vitamins A and D in margarine). Statutory legislation always overrides the organic regulations.

10.2 Permitted Ingredients and Processing Aids**General Principles**

10.2.01 DEFRA STD	(Annex VI) Sections 10.3, 10.4 and 10.5 cover the ingredients and processing aids which may be used in the preparation of foodstuffs composed essentially of one or more ingredients of plant origin, with the exception of wines.
10.2.02 DEFRA STD	(Annex VI) Pending the adoption of rules in Sections 10.3 and 10.4 of this Manual, and in order to cover specifically the preparation of foodstuffs composed of one or more livestock products, national rules shall apply.
10.2.03 OF&G STD	The raw materials of agricultural origin from which the product is prepared must be produced to these Standards by Approved Producers holding a valid Certificate of Registration or come from other sources approved by Defra.
10.2.04 OF&G STD	A processed product may only be sold as organic if it complies with the relevant labelling requirements in Section 4 of this Manual.

Ingredients of Non-Agricultural Origin (Additives and Processing Aids)

10.2.05 DEFRA STD	(Annex VI) Notwithstanding reference to any ingredient in Sections 10.3 or Section 10.5 or any processing aid in Section 10.4 any such ingredient or such processing aid shall be used only in accordance with relevant Community legislation and/or national legislation compatible with the Treaty with regard to foodstuffs and, in the absence thereof, in accordance with the principles of good manufacturing practice for foodstuffs.
10.2.06 DEFRA STD	(Annex VI) In particular: <ul style="list-style-type: none"> i) Additives shall be used according to the provisions of Directive 89/107/EEC and, where relevant, those of any comprehensive Directive as referred to in Article 3(1) of Directive 89/107/EEC; (See paragraph 10.2.24) ii) Flavourings shall be used according to the provisions of Directive 88/388/EEC and solvents according to the provisions of Directive 88/344/EEC on the approximation of the laws of the Member States on extraction solvents used in the production of foodstuffs and food ingredients. (See paragraph 10.2.27)

10.2 Permitted Ingredients and Processing Aids - continued

10.2.07 OF&G GN	The ingredients of non-agricultural origin which may be used in preparation of organically produced foods are given in limitative lists in Section 10.3. Materials not listed are prohibited.
10.2.08 OF&G GN	The processing aids which may be used in preparation of organically produced foods are given in limitative lists in Section 10.4. Materials not listed are prohibited.

Non-Organic Raw Materials

10.2.09 OF&G GN	In certain cases however, non-organically produced agricultural ingredients may be used providing: <ul style="list-style-type: none"> i) They appear on the list given at Section 10.5; and ii) They do not exceed: <ul style="list-style-type: none"> a) 5% (in an 'Organic' product) of the agricultural ingredients of the final product; or b) 30% (in a 'Made with 70% Organic ingredients' product) of the agricultural ingredients of the final product.
10.2.10 OF&G STD	The use of non-organically produced agricultural ingredients not listed in Section 10.5 is not permitted.
10.2.11 OF&G GN	Provision for authorisation to use non-organically produced agricultural ingredients may be granted by Defra where an ingredient of agricultural origin does not appear on the lists of ingredients in Section 10.5 (See paragraph 10.5.04).

Genetically Modified Organisms (GMOs)

10.2.12 OF&G STD	In accordance with the principles of organic production set out in these standards, ingredients, processing aids or additives which use genetically modified organisms, or derive from such organisms, must not be used in organic production. For a definition of genetic modification, see Section 2 and paragraph 10.2.28. See section 5.6 for further information.
10.2.13	Not Allocated

Calculation of Percentages of Ingredients

10.2.14 DEFRA STD	(Provision 5.9) For the calculation of the percentages, the rules provided for in Articles 6 and 7 of Directive 79/112/EEC shall be applied.
10.2.15 OF&G GN	As a general guide, the proportions of ingredients are calculated as they are weighed into the 'mixing bowl'. Dehydrated ingredients which are to be rehydrated, must be weighed after rehydration.

10.2 Permitted Ingredients and Processing Aids – continued

10.2.16 OF&G STD	When calculating the percentages for an 'Organic' product (+ 95% organically produced ingredients), or a 'Made with 70%' product, only the agricultural ingredients are used. The non-agricultural ingredients, including water, salt, additives, micro-organisms and other materials listed in section 10.3 and processing aids listed in section 10.4 should be excluded.
10.2.17	Not Allocated
10.2.18 DEFRA STD	(Provision 5.10) In a product referred to in Section 4.1, an ingredient obtained according to the rules laid down in this Manual (<i>i.e. organically produced</i>) shall not be present together with the same ingredient not obtained according to these rules (<i>i.e. non-organic</i>).

Notification of Changes to Product Composition

10.2.19 DEFRA STD	(Annex III 4.1) The operator responsible must notify any change in the description or of the practical measures referred to in paragraph 5.2.03 and in the initial inspection provisions foreseen in Sections 5.2, 5.3, 5.4 and 5.5 to the inspection body in due time.
10.2.20 OF&G STD	The responsible person for the operator must notify the certification office of any changes in the site, procedures or composition of the product and labelling before product produced from these changes are placed on the market. It is best to consult the certification office when changes are first contemplated to allow for any necessary inspection.

Definitions - Including Relevant Regulations & Directives

10.2.21 DEFRA STD	<p>(Annex VI 1) Ingredients: Substances, including additives, used in the preparation of products for human consumption that are still present, albeit in modified form, in the final product under the restrictions as referred to in Article 6(4) of Directive 79/112/EEC on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs to the ultimate consumer.</p> <p>Article 6(4) of Directive 79/112/EEC states:</p> <ul style="list-style-type: none"> a) 'Ingredient' shall mean any substance, including additives, used in the manufacture or preparation of a foodstuff and still present in the finished product, even if in altered form. b) Where an ingredient of the foodstuff is itself the product of several ingredients, the latter shall be regarded as ingredients of the foodstuff in question. c) The following shall not be regarded as ingredients: <ul style="list-style-type: none"> i) the constituents of an ingredient which have been temporarily separated during the manufacturing process and later reintroduced but not in excess of their original proportions;
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10.2 Permitted Ingredients & Processing Aids – continued

10.2.21 DEFRA STD	<ul style="list-style-type: none"> ii) additives: <ul style="list-style-type: none"> • whose presence in a given foodstuff is solely due to the fact that they were contained in one or more ingredients of that foodstuff, provided that they serve no technological function in the finished product; • which are used as processing aids; • substances used in the quantities strictly necessary as solvents or media for additives or flavouring. <p>d) In certain cases decisions may be taken in accordance with the procedure laid down in Article 17 as to whether the conditions described in c) (ii) are satisfied.</p>
10.2.22 DEFRA STD	<p>(Annex VI 2) Ingredients of agricultural origin:</p> <ul style="list-style-type: none"> i) Single agricultural products and products derived therefrom by appropriate washing, cleaning, thermic and/or mechanical processes and/or by physical processes having the effect to reduce the moisture content of the product; ii) Also products derived from the products mentioned under i) by other processes used in food processing, unless these products are considered as food additives or flavourings as defined under paragraphs 10.2.25 and 10.2.27.
10.2.23	<p>(Annex VI 3) Ingredients of non-agricultural origin: Ingredients other than ingredients of agricultural origin and belonging to at least one of the following categories:</p> <ul style="list-style-type: none"> i) Food additives, including carriers for food additives, as defined under paragraphs 10.2.25 and 10.2.26; ii) Flavourings, as defined under paragraph 10.2.27; iii) Water and salt; iv) Micro-organism preparations; v) Minerals (including trace elements and vitamins).
10.2.24	<p>(Annex VI 4) Processing Aids: Substances as defined in Article 1(3)(a) of Directive 89/107/EEC on the approximation of the laws of the Member States concerning food additives authorised for use in foodstuffs intended for human consumption.</p> <p>Article 1(3)(a) of Directive 89/107/EEC states:</p> <p>This Directive shall apply to:</p> <ul style="list-style-type: none"> a) processing aids - For the purpose of this Directive, 'processing aid' means any substance not consumed as a food ingredient by itself, intentionally used in the processing of raw materials, foods or their ingredients, to fulfil a certain technological purpose during treatment or processing and which may result in the unintentional but technically unavoidable presence of residues of the substance or its derivatives in the final product, provided that these residues do not present any health risk and do not have any technological effect on the finished product.

10.2 Permitted Ingredients & Processing Aids – continued

10.2.25	<p>(Annex VI 5) Food Additives: Substances as defined in Article 1(1) and (2) of Directive 89/107/EEC and covered by that Directive or by a comprehensive Directive as referred to in Article 3(1) of Directive 89/107/EEC.</p> <p>Articles 1(1) and (2) of Directive 89/107/EEC states;</p> <ol style="list-style-type: none"> 1. This Directive shall apply to food additives the various categories of which are given in Annex 1 and which are used or intended to be used as ingredients during the manufacture or preparation of a foodstuff and are still present in the final product, even if in altered form, hereinafter called 'food additives'. 2. For the purposes of this Directive 'food additive' means any substance not normally consumed as a food in itself and not normally used as a characteristic ingredient of food whether or not it has nutritive value, the intentional addition of which to food for a technological purpose in the manufacture, processing, preparation, treatment, packaging, transport or storage of such food results, or may be reasonably expected to result, in it or its by-products becoming directly or indirectly a component of such foods. <p>Annex 1 mentioned in 1 above is reproduced below:</p> <p style="margin-left: 20px;">ANNEX 1 - Categories of food additives</p> <ul style="list-style-type: none"> Colour Preservative Anti-oxidant Emulsifier Emulsifying salt Thickener Gelling agent Stabiliser This category also comprises foam stabilisers. Flavour enhancer Acid Acidity regulator These can act as two-way acidity regulators. Anti-caking agent Modified starch Sweetener Raising agent Anti-foaming agent Glazing agent These substances include lubricants. Flour treatment agent Firming agent Humectant Bulking agent Propellant gas and packaging gas Sequestrant } Inclusion of these terms in this list is without prejudice to any future decision or mention thereof in the labelling of foodstuffs intended for the final customer. Enzyme } Only those used as additives. <p>Enzyme</p> <p>Article 3(1) of the Directive states:</p> <ol style="list-style-type: none"> 1. Particular provisions in respect of the additives in the categories given in Annex 1 shall be laid down in a comprehensive directive, including existing specific directives on particular categories of additives. The directive may, however, be drawn up in stages.
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10.2 Permitted Ingredients & Processing Aids – continued

10.2.26	(Annex VI 6) Carriers including carrier solvents: Food additives used to dissolve, dilute, disperse or otherwise physically modify a food additive without altering its technological function in order to facilitate its handling, application or use.
10.2.27	<p>(Annex VI 7) Flavouring: Substances and products as defined in Article 1(2) of Directive 88/388/EEC on the approximation of laws of the Member States relating to flavourings for foodstuffs and to source materials production, and covered by that Directive.</p> <p>Article 1(2) of Directive 88/388/EEC states: For the purposes of this Directive:</p> <ul style="list-style-type: none"> a) 'flavouring' means flavouring substances, flavouring preparations, process flavourings, smoke flavourings or mixtures thereof; b) 'flavouring substance' means a defined chemical substance with flavouring properties which is obtained: <ul style="list-style-type: none"> i) by appropriate physical processes (including distillation and solvent extraction) or enzymatic or microbiological processes from material of vegetable or animal origin either in the raw state or after processing for human consumption by traditional food-preparation processes (including drying, torrefaction and fermentation); ii) by chemical synthesis or isolated by chemical processes and which is chemically identical to a substance naturally present in material of vegetable or animal origin as described in i); iii) by chemical synthesis but which is not chemically identical to a substance naturally present in material of vegetable or animal origin as described in i); c) 'flavouring preparation' means a product, other than the substances defined in b) i), whether concentrated or not, with flavouring properties, which is obtained by appropriate physical processes (including distillation and solvent extraction) or by enzymatic or microbiological processes from material of vegetable or animal origin, either in the raw state or after processing for human consumption by traditional food-preparation processes (including drying, torrefaction and fermentation); d) 'process flavouring' means a product which is obtained according to good manufacturing practices by heating to a temperature not exceeding 180°C for a period not exceeding 15 minutes a mixture of ingredients, not necessarily themselves having flavouring properties, of which at least one contains nitrogen (amino) and another is a reducing sugar; e) 'smoke flavouring' means a smoke extract used in traditional foodstuffs smoking processes. <p>Article 9(1)(d) of Directive 88/388/EEC states:</p> <ul style="list-style-type: none"> d) a list in descending order of weight of the categories of flavouring substances and flavouring preparations present classified as follows: <ul style="list-style-type: none"> - natural flavouring substances in the case of flavouring substances defined in Article 1 (2) b) i); - flavouring substances identical to natural substances in the case of flavouring substances defined in Article 1(2) b) ii); - artificial flavouring substances in the case of flavouring substances defined in Article 1 (2) b) iii); - flavouring preparations in the case of preparations defined in Article 1(2)c); - process flavourings in the case of flavourings defined in Article 1(2) d); - smoke flavourings in the case of flavourings defined in Article 1(2) e).

10.2 Permitted Ingredients & Processing Aids – continued

10.2.27 cont.	<p>Article 9(2) of Directive 88/388/EEC states:</p> <p>Without prejudice to paragraph 1(d), the word 'natural', or any other word having substantially the same meaning, may be used only for flavourings in which the flavouring component contains exclusively flavouring preparations as defined in Article 1(2)(b)(i) and/or flavouring preparations as defined in Article 1 (2) (c).</p> <p>If the sales description of the flavouring contains a reference to a foodstuff or a flavouring source, the word 'natural', or any other word having substantially the same meaning, may not be used unless the flavouring component has been isolated by appropriate physical processes, enzymatic or microbiological processes or traditional food-preparation processes solely or almost solely from the foodstuff or the flavouring source concerned.</p>
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Genetically Modified Micro-Organisms

10.2.28	<p>Micro-organisms genetically modified in the meaning of Article 2(2) of Directive 90/220/EEC.</p> <p>Article 2(2) of Directive 90/220/EEC states;</p> <p>'genetically modified organism (GMO)' means an organism in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination.</p> <p>Within the terms of this definition:</p> <ul style="list-style-type: none"> i) genetic modification occurs at least through the use of the techniques listed in Annex 1 A Part 1; ii) the techniques listed in Annex 1 A Part 2 are not considered to result in genetic modification; <p>The Annex mentioned in i) and ii) above is reproduced below:</p> <p>ANNEX 1 A</p> <p>TECHNIQUES REFERRED TO IN ARTICLE 2(2)</p> <p>PART 1</p> <p>Techniques of genetic modification referred to in Article 2(2)(I) are inter alia:</p> <ol style="list-style-type: none"> 1. recombinant DNA techniques using vector systems as previously covered by Council Recommendation 82/472/EEC; 2. techniques involving the direct introduction into an organism of heritable material prepared outside the organism including micro-injection, macro-injection and micro-encapsulation; 3. cell fusion (including protoplast fusion) or hybridisation techniques where live cells with new combinations of heritable genetic material are formed through the fusion of two or more cells by means of methods that do not occur naturally. <p>PART 2</p> <p>Techniques referred to in Article 2(2)(ii) which are not considered to result in genetic modification, on condition that they do not involve the use of recombinant DNA molecules or GMOs, are:</p> <ol style="list-style-type: none"> 1. in vitro fertilisation, 2. conjugation, transduction, transformation or any other natural process, 3. polyploidy induction.
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10.3 Permitted Ingredients of Non-Agricultural Origin

Food Additives

10.3.01 DEFRA & NOP STDS	(Annex VI A.1) The following food additives, including carriers are permitted: <i>NB – This is a positive list. Products not listed must not be used. The Defra Standards take priority. Additional restrictions may apply under the Partnership and NOP Programmes.</i>	
	Name	Specific conditions
	E 170 Calcium carbonates	All authorised functions except colouring
	E 270 Lactic Acid	No conditions
	E 290 Carbon dioxide	No conditions
	E 296 Malic acid	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted.
	E 300 Ascorbic acid	No conditions
	E 306 Tocopherol-rich extract	Anti-oxydant in fats and oils
	E 322 Lecithins	No conditions
	E 330 Citric acid	No conditions
	E 333 Calcium citrates	No conditions
	E 334 Tartaric acid	OF&G/Defra Programme – No conditions
	E 335 Sodium tartrate	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted.
	E 336 Potassium tartrate	No conditions
	E 341(i) Mono calcium phosphate	Raising agent for self-raising flour
	E 400 Alginic acid	OF&G/Defra Programme – No conditions
	E 401 Sodium alginate	OF&G/Defra Programme – No conditions
	E 402 Potassium alginate	OF&G/Defra Programme – No conditions
	E 406 Agar	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted.
	E 407 Carrageenan	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted.
	E 410 Locust bean gum	No conditions
	E 412 Guar gum	No conditions
	E 413 Tragacanth gum	OF&G/Defra Programme – No conditions
	E 414 Arabic gum	OF&G/Defra Programme – No conditions
	E 415 Xanthan	OF&G/Defra Programme – No conditions
	E 416 Karaga gum	OF&G/Defra Programme – No conditions
	E 422 Glycerol	Plant extracts
	E 440(i) Pectin	OF&G/Defra Programme – No conditions
	E 500 Sodium carbonates	No conditions
	E 501 Potassium carbonates	No conditions
E 503 Ammonium carbonates	OF&G/Defra Programme – No conditions	
E 504 Magnesium carbonates	No conditions	

10.3 Permitted Ingredients of Non-Agricultural Origin – continued

10.3.01 cont. DEFRA & NOP STDS	Annex VI A 1) The following food additives, including carriers are permitted: <i>NB – This is a positive list. Products not listed must not be used. The Defra Standards take priority. Additional restrictions may apply under the Partnership and NOP Programmes</i>	
	Name	Specific conditions
	E 516 Calcium sulphate	Carrier National Organic Programme – Not Permitted.
	E 524 Sodium hydroxide	Surface treatment of Läuengeback bread
	E 551 Silicon dioxide	Anti-caking agent for herbs and spices
	E 938 Argon	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted.
	E 941 Nitrogen	No conditions
	E 948 Oxygen	No conditions

Other Permitted Substances

10.3.02 DEFRA STD	(Annex VI A 2 to 4) The following food additives, including carriers are permitted: <i>NB – This is a positive list. Products not listed must not be used. The Defra Standards take priority. Additional restrictions may apply under the Partnership and NOP Programmes</i>																						
	Name	Specific conditions																					
10.3.03 OF&G PP STD	E 220 Sulphur dioxide	Wines - maximum level as in Directive 87/822/EEC. Partnership Programme - sulphur dioxide in wine must not exceed: <table border="1"> <thead> <tr> <th>Wine</th> <th>SO2 Total (mg/l)</th> <th>SO2 Free (mg/l)</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>90</td> <td>25</td> </tr> <tr> <td>White/rose</td> <td>100</td> <td>30</td> </tr> <tr> <td>Sparkling</td> <td>100</td> <td>10</td> </tr> <tr> <td>Dessert</td> <td>250</td> <td>70</td> </tr> <tr> <td>Bag in box</td> <td>155</td> <td>55</td> </tr> <tr> <td>Cider</td> <td>100</td> <td>30</td> </tr> </tbody> </table>	Wine	SO2 Total (mg/l)	SO2 Free (mg/l)	Red	90	25	White/rose	100	30	Sparkling	100	10	Dessert	250	70	Bag in box	155	55	Cider	100	30
Wine	SO2 Total (mg/l)	SO2 Free (mg/l)																					
Red	90	25																					
White/rose	100	30																					
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Dessert	250	70																					
Bag in box	155	55																					
Cider	100	30																					
10.3.04 DEFRA STD	Flavourings in the meaning of Directive 88/338/EEC:	Substances and products as defined in Article 1(2) b) i) and 1(2) c) of Directive 88/388/EEC and labelled as natural flavouring substances or natural flavouring preparations, according to Article 9(1) d) and (2) of that Directive. The texts of Article 1(2) b) i) and 1(2) c) and Article 9(1) d) and 2 of Directive 88/388/EEC are given in paragraph 10.2.09.																					
10.3.05 DEFRA STD	Water	Drinking water																					
10.3.06 DEFRA STD	Salt	Salt with sodium chloride or potassium chloride as basic components as generally used in food processing.																					
10.3.07 DEFRA STD	Micro-organism Preparations:	Any preparations of micro-organisms normally used in food processing, with the exception of micro-organisms genetically modified in the meaning of Article 2(2) of Directive 90/220/EEC. The text of Article 2(2) of Directive 90/220/EEC is given in paragraph 10.2.28.																					

10.3 Permitted Ingredients of Non-Agricultural Origin – continued**Additional Substances Authorised in the UK for Processing Livestock Products**

10.3.08 DEFRA STD	(Annex VI C 4) The products below are authorised either because there is a statutory requirement for their use or because Defra is permitted, for the moment, to authorise products for use in the processing of livestock products. <i>NB – This is a positive list. Products not listed must not be used. The Defra Standards take priority. Additional restrictions may apply under the Partnership and NOP Programmes</i>	
	Name	Specific conditions
10.3.09 DEFRA STD	Iron (as powdered iron) Thiamine chloride hydrochloride (Vitamin B) Nicotinic acid (Vitamin B3)	Enrichment Agents for Bread and Flour May be used for flour (other than wholemeal) within the limits specified in Schedule 1 of the Bread and Flour Regulations 1984 and they may be added in an inert carrier of calcium sulphate.
10.3.10 DEFRA STD	Vitamin A (retinol) Vitamin D (calciferol)	Enrichment Agents for Margarine May be used within the limits specified in the Margarine Regulations 1967
10.3.11 DEFRA STD	Coatings for Cheese	Grease-proof and parchment wrappings for cheese. Synthetic cheese coating without fungicides.
10.3.12 DEFRA & NOP STDS	E160b Annatto	For colouring traditional English cheeses. Obtained by aqueous extraction. National Organic Programme – Not Permitted
10.3.13 DEFRA & NOP STDS	E252 Saltpetre (Potassium Nitrate)	Curing meat National Organic Programme – Not Permitted
10.3.14 DEFRA & NOP STDS	E250 Sodium Nitrite	Curing meat National Organic Programme – Not Permitted

10.4 Permitted Processing Aids and Other Products

10.4.01 DEFRA & NOP STDS	(Annex VI B) The following products are permitted as processing aids: <i>NB – This is a positive list. Products not listed must not be used. The Defra Standards take priority. Additional restrictions may apply under the Partnership and NOP Programmes</i>	
	Name	Specific conditions
	Water	No conditions
	E509 Calcium chloride	Coagulation agent
	E170 Calcium carbonate	No conditions
	E526 Calcium hydroxide	OF&G/Defra Programme – No conditions
	E516 Calcium sulphate	Coagulation agent National Organic Programme – Not Permitted.
	E511 Magnesium chloride (nigari)	Coagulation agent
	E501 Potassium carbonate	Drying of grapes
	E500 Sodium carbonate	Sugar production
	E330 Citric acid	Oil production and hydrolysis of starch
	E524 Sodium hydroxide	Sugar production, oil production from rape seed (Brassica spp)
	E513 Sulphuric acid	Sugar production National Organic Programme – Not Permitted.
	Isopropanol (propan-2-ol)	In the crystallisation process of sugar. In due respect of the provisions of Directive 88/344/EEC as last amended by Directive 97/60/EEC For a period expiring 31/12/2006. National Organic Programme – Not Permitted.
	E290 Carbon dioxide	No conditions
	E941 Nitrogen	No conditions
	Ethanol	Solvent National Organic Programme – Not Permitted.
	Tannic acid	Filtration aid National Organic Programme – Not Permitted.
	Egg white albumen	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted.
	Casein	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted
Gelatin	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted	
Isinglass	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted	
Vegetable oils	Greasing, releasing or anti-foaming agent	
E551 Silicon dioxide gel or colloidal solution	OF&G/Defra Programme – No conditions	
Activated carbon	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted	

10.4 Permitted Processing Aids and Other Products - continued

10.4.01 cont.	(Annex VI B) The following products are permitted as processing aids: <i>NB – This is a positive list. Products not listed must not be used. The Defra Standards take priority. Additional restrictions may apply under the Partnership and NOP Programmes</i>	
DEFRA & NOP STDS	E553 Talc	OF&G/Defra Programme – No conditions
	E558 Bentonite	OF&G/Defra Programme – No conditions
	E559 Kaolin	OF&G/Defra Programme – No conditions
	Diatomaceous earth	OF&G/Defra Programme – No conditions
	Perlite	No conditions
	Hazelnut shells	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted
	Rice meal	OF&G/Defra Programme – No conditions National Organic Programme – Not Permitted
	E901 Beeswax	Releasing agent National Organic Programme – Not Permitted
	E903 Carnauba wax	Releasing agent National Organic Programme – Not Permitted
	(Annex II B IV) Ethylene	Degreening bananas, kiwis, kakis and flower induction of pineapples Must be approved by certification body before use.
	(Annex II B IV) Potassium alum (Kalinite)	Prevention of ripening of bananas National Organic Programme – Not Permitted
Preparations of Micro-organisms and Enzymes	Any preparations of micro-organisms and enzymes normally used as processing aids in food processing, with the exception of micro-organisms genetically modified in the meaning of Article 2(2) of Directive 90/220/EEC. Article 2(2) of Directive 90/220/EEC is given in paragraph 10.2.10.	
10.4.02 OF&G STD	Storage is permitted under the following conditions: i) Controlled atmosphere using Argon, Nitrogen & Carbon dioxide; ii) Temperature control; iii) Drying & dessicating; iv) Humidity regulation.	
10.4.03	Not allocated	

10.5 Ingredients of Agricultural Origin which have not been Organically Produced

10.5.01 DEFRA STD	(Annex VI C.1) Unprocessed Vegetable Products as well as products derived therefrom by processes referred to under the definition given in 10.2.22: <i>NB – This is a positive list. Non-organic ingredients not listed must not be used.</i>																						
	<p>i) Edible fruits, nuts and seeds</p> <table border="0"> <tr> <td>Acorns</td> <td>Quercus Spp.</td> </tr> <tr> <td>Cola Nuts</td> <td>Cola acuminata</td> </tr> <tr> <td>Gooseberries</td> <td>Ribes uva-crispa</td> </tr> <tr> <td>Maracujas (passion fruit)</td> <td>Passiflora edulis</td> </tr> <tr> <td>Raspberries (dried)</td> <td>Rubus idaeus</td> </tr> <tr> <td>Red currants (dried)</td> <td>Ribes rubrum</td> </tr> </table> <p>ii) Edible spices and herbs</p> <table border="0"> <tr> <td>Pepper (Peruvian)</td> <td>Schinus molle L.</td> </tr> <tr> <td>Horseradish seeds</td> <td>Amoracia rusticana</td> </tr> <tr> <td>Lesser galanga</td> <td>Alpina officinarum</td> </tr> <tr> <td>Safflower flowers</td> <td>Carthamus tinctorius</td> </tr> <tr> <td>Watercress herb</td> <td>Nasturtium officinale</td> </tr> </table> <p>iii) Miscellaneous</p> <p>Algae, including seaweed, permitted in conventional foodstuffs preparation</p>	Acorns	Quercus Spp.	Cola Nuts	Cola acuminata	Gooseberries	Ribes uva-crispa	Maracujas (passion fruit)	Passiflora edulis	Raspberries (dried)	Rubus idaeus	Red currants (dried)	Ribes rubrum	Pepper (Peruvian)	Schinus molle L.	Horseradish seeds	Amoracia rusticana	Lesser galanga	Alpina officinarum	Safflower flowers	Carthamus tinctorius	Watercress herb	Nasturtium officinale
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Lesser galanga	Alpina officinarum																						
Safflower flowers	Carthamus tinctorius																						
Watercress herb	Nasturtium officinale																						
10.5.02 DEFRA STD	(Annex VI C.2) Vegetable Products, processed by processes as referred to under the definition given in paragraph 10.2.22.																						
	<p>i) Fats and oils, whether or not refined, but not chemically modified, derived from plants OTHER than (<i>the following oils must be organically produced in accordance with these standards</i>):</p> <table border="0"> <tr> <td>Cocoa</td> <td>Theobroma cacao</td> </tr> <tr> <td>Coconut</td> <td>Cocos nucifera</td> </tr> <tr> <td>Olive</td> <td>Olea europaea</td> </tr> <tr> <td>Sunflower</td> <td>Helianthus annuus</td> </tr> <tr> <td>Palm</td> <td>Elaeis guineensis</td> </tr> <tr> <td>Rape</td> <td>Brassica napus, rapa</td> </tr> <tr> <td>Safflower</td> <td>Carthamus tinctorius</td> </tr> <tr> <td>Sesame</td> <td>Sesamum indicum</td> </tr> <tr> <td>Soya</td> <td>Glycine max</td> </tr> </table> <p>ii) The following sugars, starches and other products from cereals and tubers:</p> <p>Fructose Rice paper Unleavened bread paper Starch from rice and waxy maize, not chemically modified</p> <p>iii) Miscellaneous</p> <p>Coriander, smoked Pea protein Pisum spp. Rum - only obtained from cane sugar juice Kirsch prepared on the basis of fruits and flavourings as referred to in section 10.3 of this Manual.</p>	Cocoa	Theobroma cacao	Coconut	Cocos nucifera	Olive	Olea europaea	Sunflower	Helianthus annuus	Palm	Elaeis guineensis	Rape	Brassica napus, rapa	Safflower	Carthamus tinctorius	Sesame	Sesamum indicum	Soya	Glycine max				
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Sesame	Sesamum indicum																						
Soya	Glycine max																						

10.5 Ingredients of Agricultural Origin which have not been Organically Produced – continued

10.5.03 DEFRA STD	(Annex VI C.3) Animal Products Aquatic organisms, not originating from aquaculture, and permitted in conventional foodstuffs preparation Gelatin Whey powder 'herasuola' Sausage casings
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Procedure for gaining authorisation for additional agricultural products

10.5.04 DEFRA STD	(Provision 5.11 GN) Paragraphs 5.3(b) and 5a(b) of Council Regulation 2092/91 permit Defra to authorise the use of certain ingredients of agricultural origin not listed in Section 10.5, where it can be demonstrated to the satisfaction of Defra that such ingredients are not available in organic form on the Community market. Further advice can be obtained from Defra on this derogation. The lists of additives and processing aids, and their conditions for use, in Section 10.3 and 10.4 respectively, are not covered by this derogation, and can only be changed by Commission Regulation under the procedures highlighted in Article 14 of Council Regulation 2092/91.
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