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# $ightharpoonup \underline{B}$ COMMISSION IMPLEMENTING REGULATION (EU) 2017/2470

of 20 December 2017

establishing the Union list of novel foods in accordance with Regulation (EU) 2015/2283 of the European Parliament and of the Council on novel foods

(Text with EEA relevance)

(OJ L 351, 30.12.2017, p. 72)

# Amended by:

		C	Official Jou	rnal
		No	page	date
<u>M1</u>	Commission Implementing Regulation (EU) 2018/460 of 20 March 2018	L 78	2	21.3.2018
<u>M2</u>	Commission Implementing Regulation (EU) 2018/461 of 20 March 2018	L 78	7	21.3.2018
<u>M3</u>	Commission Implementing Regulation (EU) 2018/462 of 20 March 2018	L 78	11	21.3.2018
<u>M4</u>	Commission Implementing Regulation (EU) 2018/469 of 21 March 2018	L 79	11	22.3.2018
► <u>M5</u>	Commission Implementing Regulation (EU) 2018/991 of 12 July 2018	L 177	9	13.7.2018
<u>M6</u>	Commission Implementing Regulation (EU) 2018/1011 of 17 July 2018	L 181	4	18.7.2018
<u>M7</u>	Commission Implementing Regulation (EU) 2018/1018 of 18 July 2018	L 183	9	19.7.2018
<u>M8</u>	Commission Implementing Regulation (EU) 2018/1032 of 20 July 2018	L 185	9	23.7.2018
► <u>M9</u>	Commission Implementing Regulation (EU) 2018/1023 of 23 July 2018	L 187	1	24.7.2018
► <u>M10</u>	Commission Implementing Regulation (EU) 2018/1122 of 10 August 2018	L 204	36	13.8.2018
► <u>M11</u>	Commission Implementing Regulation (EU) 2018/1123 of 10 August 2018	L 204	41	13.8.2018
► <u>M12</u>	Commission Implementing Regulation (EU) 2018/1132 of 13 August 2018	L 205	15	14.8.2018
► <u>M13</u>	Commission Implementing Regulation (EU) 2018/1133 of 13 August 2018	L 205	18	14.8.2018
► <u>M14</u>	Commission Implementing Regulation (EU) 2018/1293 of 26 September 2018	L 243	2	27.9.2018
► <u>M15</u>	Commission Implementing Regulation (EU) 2018/1631 of 30 October 2018	L 272	17	31.10.2018
► <u>M16</u>	Commission Implementing Regulation (EU) 2018/1632 of 30 October 2018	L 272	23	31.10.2018

► <u>M17</u>	Commission Implementing Regulation (EU) 2018/1633 of 30 October 2018	L 272	29	31.10.2018
► <u>M18</u>	Commission Implementing Regulation (EU) 2018/1647 of 31 October 2018	L 274	51	5.11.2018
► <u>M19</u>	Commission Implementing Regulation (EU) 2018/1648 of 29 October 2018	L 275	1	6.11.2018
► <u>M20</u>	Commission Implementing Regulation (EU) 2018/1991 of 13 December 2018	L 320	22	17.12.2018
► <u>M21</u>	Commission Implementing Regulation (EU) 2018/2016 of 18 December 2018	L 323	1	19.12.2018
► <u>M22</u>	Commission Implementing Regulation (EU) 2018/2017 of 18 December 2018	L 323	4	19.12.2018
► <u>M23</u>	Commission Implementing Regulation (EU) 2019/108 of 24 January 2019	L 23	4	25.1.2019
► <u>M24</u>	Commission Implementing Regulation (EU) 2019/109 of 24 January 2019	L 23	7	25.1.2019
► <u>M25</u>	Commission Implementing Regulation (EU) 2019/110 of 24 January 2019	L 23	11	25.1.2019

# **COMMISSION IMPLEMENTING REGULATION (EU) 2017/2470**

#### of 20 December 2017

establishing the Union list of novel foods in accordance with Regulation (EU) 2015/2283 of the European Parliament and of the Council on novel foods

(Text with EEA relevance)

# Article 1

#### Union list of authorised novel foods

The Union list of novel foods authorised to be placed on the market within the Union as referred to in Article 6(1) of Regulation (EU) 2015/2283 is hereby established and set out in the Annex to this Regulation.

# Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

#### ANNEX

# UNION LIST OF NOVEL FOODS

#### Content of the list

- 1. The Union list shall consist of Tables 1 and 2.
- 2. Table 1 includes the authorised novel foods and contains the following information:
  - Column 1: Authorised novel food
  - Column 2: Conditions under which the novel food may be used. This column is further subdivided into two: Specified food category and Maximum levels
  - Column 3: Additional specific labelling requirements
  - Column 4: Other requirements
- 3. Table 2 includes the specifications on novel foods and contains the following information:
  - Column 1: Authorised novel food
  - Column 2: Specifications

Table 1: Authorised novel foods

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀		
N-Acetyl-D-neuraminic acid	Specified food category	Maximum levels					
	Infant and follow-on formulae as defined by Regulation (EU) No 609/2013 (1)	0,05 g/L of reconstituted formula		neuraminic acid' Food supplements containing <i>N</i> - acetyl-D-neuraminic acid shall bear a statement that the food supplement should not be given to infants, young children and children under 10 years of age where they consume breast milk or other foods with added <i>N</i> -acetyl-D-neuraminic acid within the same twenty			
	Processed cereal-based foods and baby foods for infants and young children as defined by Regulation (EU) No 609/2013	0,05 g/kg for solid foods			should not be given to infants, young children and children under 10 years of age where they consume breast milk or other foods		
	Foods for special medical purposes for infants and young children as defined by Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the infants and young children for whom the products are intended but in any case not higher than the maximum levels specified for the category mentioned in the table corresponding to the products.					
	Total diet replacement foods for weight control as defined by Regulation (EU) No 609/2013	0,2 g/L (drinks) 1,7 g/kg (bars)					
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014 (2)	1,25 g/kg					
	Unflavoured pasteurised and sterilised (including UHT) milk-based products	0,05 g/L					

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Unflavoured fermented milk-based products, heat treated after fermentation, flavoured fermented milk products including heat-treated products	0,05 g/L (beverages) 0,4 g/kg (solids)			
	Dairy analogues, including beverage whiteners	0,05 g/L (beverages) 0,25 g/kg (solids)			
	Cereal bars	0,5 g/kg			
	Table top sweeteners	8,3 g/kg			
	Fruit and vegetable-based drinks	0,05 g/L			
	Flavoured drinks	0,05 g/L			
	Speciality coffee, tea, herbal and fruit infusions, chicory; tea, herbal and fruit infusions and chicory extracts; tea, plant, fruit and cereal preparations for infusions	0,2 g/kg			
	Food Supplements as defined in Directive 2002/46/EC ( <sup>3</sup> )	300 mg/day for general population older than 10 years 55 mg/day for infants 130 mg/day for young children 250 mg/day for children between 3 to 10 years of age			
Adansonia digitata (Baobab) dried fruit pulp	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Baobab fruit pulp'		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Ajuga reptans extract from cell cultures	Specified food category	Maximum levels			
	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of a similar extract of the flowering aerial parts of <i>Ajuga reptans</i>			
L-Alanyl-L- Glutamine	Specified food category	Maximum levels			
	Food Supplements as defined in Directive 2002/46/EC				
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013 excluding foods for infants and young children				
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen				
Algal oil from the microalgae <i>Ulkenia</i>	Specified food category	Maximum levels of DHA	The designation of the novel food on the labelling of the foodstuffs		
sp.	Bakery products (breads, rolls and sweet biscuits)	200 mg/100 g	containing it shall be 'Oil from the micro-algae <i>Ulkenia sp.</i> '		
	Cereal bars	500 mg/100 g			
	Non-alcoholic beverages (including milk based beverages)	60 mg/100 ml			

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	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
<u>M25</u>						
	Allanblackia seed oil	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
		Yellow fat spreads and cream based spreads	30 g/100 g	containing it shall be 'Allanblackia seed oil'		
		Mixtures of vegetable oils (*) and milk (falling under the food category: Dairy analogues, including beverage whiteners)	30 g/100 g			
		(*) Except olive oils and olive pomace oils as Regulation (EU) No 1308/2013.	defined in Part VIII of Annex VII of			
<u>M9</u>						
	Aloe macroclada Baker leaf extract	Specified food category	Maximum levels			
		Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of the similar gel derived from Aloe vera (L.) Burm.			
	Antarctic Krill oil from Euphausia superba	Specified food category	Maximum levels of combined DHA and EPA	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lipid extract		
	•	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g	from the crustacean Antarctic Krill (Euphausia superba)'		
		Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/100 g			

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Non-alcoholic beverages Milk-based drinks Dairy analogue drinks	80 mg/100 ml			
	Spreadable fat and dressings	600 mg/100 g			
	Cooking fats	360 mg/100 ml			
	Breakfast cereals	500 mg/100 g			
	Bakery products (breads, rolls and sweet biscuits)	200 mg/100 g			
	Nutrition bars/cereal bars	500 mg/100 g			
	Food Supplements as defined in Directive 2002/46/EC	3 000 mg/day for the general population 450 mg/day for pregnant and lactating women			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal			

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀	
	Processed cereal-based food and baby food intended for infants and young children covered by Regulation (EU) No 609/2013	200 mg/100 ml				
	Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen					
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014					
Antarctic Krill oil rich in phosp- holipids from Euphausia superba	Specified food category	Maximum levels of combined DHA and EPA	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lipid extract from the crustacean Antarctic Krill (Euphausia superba)'			
	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g				
	Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/				
	Non-alcoholic beverages Milk-based drinks Dairy analogue drinks	80 mg/100 ml				
	Spreadable fat and dressings	600 mg/100 g				
	Cooking fats	360 mg/100 ml				
	Breakfast cereals	500 mg/100 g				
	Bakery products (breads, rolls and sweet biscuits)	200 mg/100 g				
	Nutrition bars/cereal bars	500 mg/100 g				

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Food Supplements as defined in Directive 2002/46/EC	3 000 mg/day for the general population 450 mg/day for pregnant and lactating women			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal			
	Processed cereal-based food and baby food intended for infants and young children covered by Regulation (EU) No 609/2013	200 mg/100 ml			
	Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen				
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014				
Arachidonic acid-rich oil from	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
the fungus Mortierella alpina	Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013	In accordance with Regulation (EU) No 609/2013	containing it shall be 'Oil from Mortierella alpina' or 'Mortierella alpina oil'		
	Foods for special medical purposes for premature infants as defined in Regulation (EU) No 609/2013	In accordance with Regulation (EU) No 609/2013			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Argan oil from Argania spinosa	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	As seasonings	Not specified	containing it shall be 'Argan oil' and if used as seasoning 'Vegetable oil only for seasoning' shall be		
	Food Supplements as defined in Directive 2002/46/EC	In line with normal food use of vegetable oils	mentioned on the label		
Astaxanthin-rich oleoresin from Haematococcus pluvialis algae	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food Supplements as defined in Directive 2002/46/EC	40-80 mg/day of oleoresin, resulting in $\leq 8$ mg astaxanthin per day	containing it shall be 'Astaxanthin'		
Basil seeds (Ocimum basilicum)	Specified food category	Maximum levels			
	Fruit juice and fruit/vegetable blend beverages	3 g/200 ml for addition of whole basil seeds ( <i>Ocimum basilicum</i> )			
Fermented black bean extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Fermented black bean (Soya) extract' or 'Fer- mented Soya extract'		
	Food Supplements as defined in Directive 2002/46/EC	4,5 g/day			
Bovine lactoferrin	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013 (ready to drink)	100 mg/100 ml	containing it shall be 'Lactoferrin from cows' milk'		
	Foods on dairy basis intended for young children (ready to eat/drink)	200 mg/100 g			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Processed cereal food (solid)	670 mg/100 g			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	Depending on the needs of the individual up to 3 g/day			
	Beverages based on milk	200 mg/100 g			
	Powdered drink mixes based on milk (ready to drink)	330 mg/100 g			
	Beverages based on fermented milk (including yoghurt drinks)	50 mg/100 g			
	Non-alcoholic drinks	120 mg/100 g			
	Products based on yoghurt	80 mg/100 g			
	Products based on cheese	2 000 mg/100 g			
	Ice cream	130 mg/100 g			
	Cakes and pastries	1 000 mg/100 g			
	Candies	750 mg/100 g			
	Chewing gum	3 000 mg/100 g			

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Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀			
16  Bovine milk basic	Specified food category	Maximum levels	The designation of the novel food		Authorised on 20 Noven			
whey protein isolate		30 mg/100 g (powder) 3,9 mg/100 mL (reconstituted)	on the labelling of the foodstuffs containing it shall be 'Milk whey protein isolate'.  Food supplements containing bovine milk basic whey protein isolate shall bear the following statement:  'This food supplement should not be consumed by children/adolescents under the age of three/eighteen (*) years'  (*) Depending on the age group the food supplement is intended for.	on the labelling of the foodstuffs containing it shall be 'Milk whey protein isolate'.  Food supplements containing bovine milk basic whey protein isolate shall	containing it shall be 'Milk whey protein isolate'.  Food supplements containing bovine milk basic whey protein isolate shall	containing it shall be 'Milk whey protein isolate'.  Food supplements containing bovine milk basic whey protein isolate shall		2018. This inclusion is b on proprietary scier evidence and scientific protected in accordance Article 26 of Regulation ( 2015/2283.
	Follow-on formulae as defined in Regulation (EU) No 609/2013	30 mg/100 g (powder) 4,2 mg/100 mL (reconstituted)			Applicant: Armor Prote S.A.S., 19 bis, rue d Libération 35460 Saint-B en-Coglès, France. During period of data protection			
	Total diet replacement foods for weight control as defined by Regulation (EU) No 609/2013	300 mg/day			novel food bovine milk whey protein isolate is orised for placing on market within the Union by Armor Protéines S			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	58 mg/day for young children 380 mg/day for children and adolescents from 3 to 18 years of age 610 mg/day for adults			unless a subsequent appl obtains authorisation for novel food without refer to the proprietary scie evidence or scientific protected in accordance Article 26 of Regulation 2015/2283 or with			
	Food Supplements as defined in Directive 2002/46/EC	58 mg/day for young children 250 mg/day for children and adolescents from 3 to 18 years of age 610 mg/day for adults			agreement of Armor Prot S.A.S. End date of the data protec 20 November 2023.			

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Buglossoides arvensis seed oil	Specified food category	Maximum levels of stearidonic acid (STA)	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Refined		
	Dairy products and analogues	250 mg/100 g	Buglossoides oil'		
		75 mg/100 g for drinks			
	Cheese and cheese products	750 mg/100 g			
	Butter and other fat and oil emulsions including spreads (not for cooking or frying purposes)	750 mg/100 g			
	Breakfast cereals	625 mg/100 g			
	Food supplements as defined in Directive 2002/46/EC, excluding food supplements for infants and young children	500 mg/day			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013, excluding foods for special medical purposes intended for infants and young children	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Calanus finmarchicus oil	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food supplements as defined in Directive 2002/46/EC	2,3 g/day	containing it shall be 'oil from Calanus finmarchicus (crustacean)'		
Chewing gum base (monomethoxypoly-	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
ethylene glycol)	Chewing gum	8 %	containing it shall be 'Gum base (including 1,3-butadiene, 2-methylhomopolymer, maleated, esters with polyethylene glycol mono-Me ether)' or 'Gum base (including CAS No: 1246080-53-4)'		
Chewing gum base (Methyl vinyl	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
ether-maleic anhydride copolymer)	Chewing gum	2 %	containing it shall be 'Gum base (including methyl vinyl ether-maleic anhydride copolymer)' or 'Gum base (including CAS No 9011-16-9)'		
Chia oil from <i>Salvia</i> hispanica	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
•	Fats and oils	10 %	containing it shall be 'Chia oil (Salvia hispanica)'		
	Pure chia oil	2 g/day			
	Food Supplements as defined in Directive 2002/46/EC	2 g/day			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Chia seeds (Salvia hispanica)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
•	Bread products	5 % (whole or ground chia seeds)	containing it shall be 'Chia seeds (Salvia hispanica)'  2. Pre-packaged Chia (Salvia hispanica) seeds shall carry additional labelling to inform the		
	Baked products	10 % whole chia seeds			
	Breakfast cereals	10 % whole chia seeds	consumer that the daily intake is no more than 15 g.		
	Fruit, nut and seed mixes	10 % whole chia seeds			
	Fruit juice and fruit/vegetable blend beverages	15 g/day for addition of whole, mashed or ground chia seeds			
	Pre-packaged Chia seed as such	15 g/day whole chia seeds			
	Fruit spreads	1 % whole chia seeds			
	Yoghurt	1,3 g whole chia seeds per 100 g of yoghurt or 4,3 g whole chia seeds per 330 g of yoghurt (portion)			
	Sterilised ready to eat meals based on cereal grains, pseudocereals grains and/or pulses	5 % whole chia seeds			
Chitin-glucan from	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food Supplements as defined in Directive 2002/46/EC	5 g/day	containing it shall be 'Chitin-glucan from Aspergillus niger'		
Chitin-glucan omplex from	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs	The designation of the novel food	
omplex from Fomes fomentarius	Food Supplements as defined in Directive 2002/46/EC	5 g/day	containing it shall be 'Chitin-glucan from Fomes fomentarius'		

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Chitosan extract from fungi (Agaricus bisporus; Aspergillus niger)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of chitosan from crustaceans	containing it shall be 'Chitosan extract from <i>Agaricus bisporus</i> ' or 'Chitosan extract from <i>Aspergillus niger</i> '		
Chondroitin sulphate	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food supplements as defined in Directive 2002/46/EC for adult population, excluding pregnant and lactating women	1 200 mg/day	containing it shall be 'Chondroitin sulphate derived from microbial fermentation and sulphation'		
Chromium Picolinate	Specified food category	Maximum levels of total chromium	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Chromium Picolinate'		
	Foods covered by Regulation (EU) No 609/2013	250 μg/day			
	Foods fortified in accordance with Regulation (EC) No 1925/2006 (4)				
Cistus incanus L. Pandalis herb	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Herbal infusions	Intended daily intake: 3 g herbs/day (2 cups/day)	containing it shall be 'Cistus incanus L. Pandalis herb'		
Citicoline	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food Supplements as defined in Directive 2002/46/EC	500 mg/day	containing it shall be 'Citicoline'  The labelling of foods containing citicoline shall bear a statement		
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	250 mg per serving and a maximum daily consumption level of 1 000 mg	that the product is not intended to be consumed by children		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Clostridium butyricum	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food Supplements as defined in Directive 2002/46/EC	$1,35 \times 10^8$ CFU/day	containing it shall be 'Clostridium butyricum MIYAIRI 588 (CBM 588)' or 'Clostridium butyricum (CBM 588)'		
Extract of defatted cocoa powder	Specified food category	Maximum levels	per day		
	Nutrition bars	1 g/day and 300 mg polyphenols corresponding to not more than 550 mg of extract of defatted cocoa powder in one portion of food (or food supplement)			
	Milk based beverages				
	Any other foods (including food supplements as defined in Directive 2002/46/EC) which have become established vehicles for functional ingredients and which are typically positioned for consumption by health conscious adults				
Low fat cocoa extract	Specified food category	Maximum levels	Consumers shall be instructed not to consume more than 600 mg of		
	Foods including food supplements as defined in Directive 2002/46/EC	730 mg per serving and around 1,2 g/day	cocoa flavanols per day		
Coriander seed oil from Coriandrum sativum	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food Supplements as defined in Directive 2002/46/EC	600 mg/day	containing it shall be 'Coriander seed oil'		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Cranberry extract powder	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		Authorised on 20 Nover 2018. This inclusion is b on proprietary scier
	Food Supplements as defined in Directive 2002/46/EC for the adult population 350 mg/day	containing it shall be 'cranberry extract powder'		evidence and scientific protected in accordance Article 26 of Regulation 2015/2283.	
					Applicant: Ocean S Cranberries Inc. One O Spray Drive Lake Middleboro, MA, 02 USA.
					During the period of protection the novel of cranberry extract powder authorised for placing the market within the U only by Ocean Spray C berries Inc. unless subsequent applicant ob authorisation for the refood without reference the proprietary scient evidence or scientific protected in accordance Article 26 of Regulation 2015/2283 or with agreement of Ocean SC Cranberries Inc.
					End date of the protection: 20 Nove 2023.

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Crataegus pinna- tifida dried fruit	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Herbal infusions	In line with normal food use of Crataegus laevigata	containing it shall be 'Crataegus pinnatifida dried fruit'		
	Jams and jellies in accordance with Directive 2001/113/EC (5)				
	Compotes				
α-cyclodextrin	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Alpha-cyclodextrin' or 'α-cyclodextrin'		
γ-cyclodextrin	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Gamma-Cyclodextrin' or 'γ-Cyclodextrin'		
Decorticated grains of Digitaria exilis (Kippist) Stapf (Traditional food from a third country)	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'decorticated fonio ( <i>Digitaria exilis</i> ) grains'		
Dextran preparation produced by Leuconostoc	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Dextran'		
mesenteroides	Bakery products	5 %			

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Diacylglycerol oil of plant origin	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
piant origin	Cooking oils		containing it shall be 'Diacylglycerol oil of plant origin (at least 80 %		
	Fat spreads		diacylglycerols)'		
	Salad dressings				
	Mayonnaise				
	Meal replacement for weight control (as drinks)				
	Bakery products				
	Yoghurt type products				
Dihydrocapsiate	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
(DHC)	Cereal bars	9 mg/100 g	containing it shall be 'Dihydro-capsiate'		
	Biscuits, cookies and crackers	9 mg/100 g	2. Food supplements containing		
	Rice based snacks	12 mg/100 g	synthetic dihydrocapsiate will be labelled as 'not intended for children up to 4.5 years'		
	Carbonated drinks, dilutable drinks, fruit juice based beverages	1,5 mg/100 ml	— children up to 4.5 years		
	Vegetable drinks	2 mg/100 ml			
	Coffee based drinks, tea based drinks	1,5 mg/100 ml			
	Flavoured water — still	1 mg/100 ml			
	Precooked oatmeal cereal	2,5 mg/100 g			
	Other cereals	4,5 mg/100 g			
	Ice cream, dairy desserts	4 mg/100 g			
	Pudding mixes (ready to eat)	2 mg/100 g			

	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
		Products based on yoghurt	2 mg/100 g			
		Chocolate confectionery	7,5 mg/100 g			
		Hard candy	27 mg/100 g			
		Sugar-free gum	115 mg/100 g			
		Whitener/creamer	40 mg/100 g			
		Sweeteners	200 mg/100 g			
		Soup (ready to eat)	1,1 mg/100 g			
		Salad dressing	16 mg/100 g			
		Vegetable protein	5 mg/100 g			
		Ready to eat meals	3 mg/meal			
		Meal replacements for weight control	3 mg/meal			
		Meal replacement for weight control (as drinks)	1 mg/100 ml			
		Food Supplements as defined in Directive 2002/46/EC	3 mg/single intake 9 mg/day			
		Non-alcoholic powdered drink mixes	14,5 mg/kg equivalent to 1,5 mg/100 ml			
<b>▼</b> <u>M13</u>						
	Dried aerial parts of Hoodia parviflora	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		Authorised on 3 September 2018. This inclusion is based
	1100uu purvijioru	Food Supplements as defined in Directive 2002/46/EC for adult population	9,4 mg/day	containing it shall be 'dried aerial parts of Hoodia parviflora'		on proprietary scientific evidence and scientific data protected in accordance with Article 26 of Regulation (EU) 2015/2283.

**▼**<u>M13</u>

	Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
						Applicant: Desert Labs, Ltd Kibbutz Yotvata, 88820 Israel.  During the period of data protection the novel food dried aerial parts of Hoodia parviflora is authorised for placing on the market within the Union only by Desert Labs, Ltd unless a subsequent applicant obtains authorisation for the novel food without reference to the proprietary scientific evidence or scientific data protected in accordance with Article 26 of Regulation (EU) 2015/2283 or with the agreement of Desert Labs, Ltd.  End date of the data protection: 3 September 2023.
<u>M9</u>	Dried extract of Lippia citriodora from cell cultures	Specified food category  Food Supplements as defined in Directive 2002/46/EC	Maximum levels  In line with normal use in food supplements of a similar extract from the leaves of Lippia citriodora	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'dried extract of <i>Lippia citriodora</i> from cell cultures HTN®Vb'		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Echinacea angus- tifolia extract from	Specified food category	Maximum levels			
cell cultures	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of a similar extract from the root of <i>Echinacea angustifolia</i>			
Echinacea purpurea extract from cell	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
cultures	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of a similar extract from florets within the flower head of <i>Echinacea purpurea</i>	containing it shall be 'dried extract of <i>Echinacea purpurea</i> from cell cultures HTN <sup>®</sup> Vb'		
Echium plan- tagineum oil	Specified food category	Maximum levels of stearidonic acid (STA)	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Refined echium oil'		
	Milk-based products and drinkable yoghurt products delivered in a single dose	250 mg/100 g; 75 mg/100 g for drinks			
	Cheese preparations	750 mg/100 g			
	Spreadable fat and dressings	750 mg/100 g			
	Breakfast cereals	625 mg/100 g			
	Food supplements as defined in Directive 2002/46/EC	500 mg/day			
_	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal			

1112						
	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
7 <u>M18</u>						
	Egg membrane hydrolysate	Specified food category  Food Supplements as defined in Directive 2002/46/EC intended for the general adult population	Maximum levels 450 mg/day	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'egg membrane hydrolysate'.		Authorised on 25 Novembe 2018. This inclusion is base on proprietary scientific evidence and scientific dat protected in accordance with Article 26 of Regulation (EU 2015/2283.
						Applicant: Biova, LLC. 5800 Merle Hay Rd, Suiti 14 PO Box 394 Johnston 50131, Iowa USA. During the period of data protection the novel food eggmembrane hydrolysate i authorised for placing of the market within the Union only by Biova, LLC. unless subsequent applicant obtain: authorisation for the nove food without reference to the proprietary scientific evidence or scientific data protected in accordance with Article 26 of Regulation (EU 2015/2283) or with the agreement of Biova, LLC.
						End date of the dat protection: 25 November 2023

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Epigallocatechin gallate as a purified	Specified food category	Maximum levels	The labelling shall bear a statement that consumers should not consume		
extract from green tea leaves (Camellia sinensis)	Foods including food supplements as defined in Directive 2002/46/EC	150 mg of extract in one portion of food or food supplement	more than 300 mg of extract per day		
L-ergothioneine	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food supplements as defined in Directive 2002/46/EC	30 mg/day for general population (excluding pregnant and lactating women)	containing it shall be 'L-ergothio- neine'		
		20 mg/day for children older than 3 years			
Ferric Sodium EDTA	Specified food category	Maximum levels (expressed as anhydrous EDTA)	The designation of the novel food on the labelling of the foodstuff containing it shall be 'Ferri		
	Food supplements as defined in Directive 2002/46/EC 18 mg/day for children 75 mg/day for adults				
	Foods covered by Regulation (EU) No 609/2013	12 mg/100 g			
	Foods fortified in accordance with Regulation (EC) No 1925/2006				
Ferrous ammonium phosphate	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
pp	Food supplements as defined in Directive 2002/46/EC	To be used in compliance with Directive 2002/46/EC, Regulation (EU) No 609/2013 and/or Regu-	containing it shall be 'Ferrous		
	Foods covered by Regulation (EU) No 609/2013	lation (EC) No 1925/2006			
	Foods fortified in accordance with Regulation (EC) No 1925/2006				

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements Other requirements ► M18 Data Protection ◀
Fish peptides from Sardinops sagax	Specified food category	Maximum levels fish peptide product	The designation of the novel food on the labelling of the foodstuffs
Surumops sugue	Foods based on yoghurt, yoghurt drinks, fermented milk products, and powdered milk	0,48 g/100 g (ready to eat/drink)	containing it shall be 'Fish (Sardinops sagax) peptides'
	Flavoured water, and vegetable-based drinks	0,3 g/100 g (ready to drink)	
	Breakfast cereals	2 g/100 g	
	Soups, stews and soup powders	0,3 g/100 g (ready to eat)	
Flavonoids from Glycyrrhiza glabra	Specified food category	Glycyrrhiza glabra  on the labelling of the foods containing it shall be 'Flavor from Glycyrrhiza glabra L.'	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Flavonoids' flavonoids shall
	Beverages based on milk		
	Beverages based on fruit or vegetables  Beverages based on fruit or vegetables  Food Supplements as defined in Directive 2002/46/EC  the product was added as a not food ingredient shall bear statement that:  (a) the product should not consumed by pregnant	2. The labelling of the foods where the product was added as a novel single portions.	
		food ingredient shall bear a statement that:	
		(a) the product should not be consumed by pregnant and breast feeding women,	
Total diet replacement for weight control as defined in Regulation (EU) No 609/2013  Foods for special medical purposes as defined in Regulation (EU) No 609/2013  120 mg/day  120 mg/day	120 mg/day	children and young adoles- cents; and	
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	120 mg/day	(b) people taking prescription drugs should only consume the product under medical supervision;
			(c) a maximum of 120 mg of flavonoids per day should be consumed.

02017R2470 - EN - 14.02.2019 - 007.001 - 28

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
			3. The amount of flavonoids in the final food shall be indicated on the labelling of the food containing it.		
Fucoidan extract	Specified food category	Maximum levels	The designation of the novel food		
Fucus vesiculosus	Foods including food supplements as defined in Directive 2002/46/EC for the general population	250 mg/day	on the labelling of the foodstuffs containing it shall be 'Fucoidan extract from seaweed <i>Fucus vesiculosus</i> '.		
Fucoidan extract	Specified food category	Maximum levels	The designation of the novel food		
from the seaweed Undaria pinnatifida	Foods including food supplements as defined in Directive 2002/46/EC for the general population	250 mg/day	on the labelling of the foodstuffs containing it shall be 'Fucoidan extract from seaweed Undaria pinna- tifida'		
2'-Fucosyllactose	Specified food category	Maximum levels	1. The designation of the novel food		
	Unflavoured pasteurised and sterilised (including UHT) milk-based products  on the labelling of the foodstr containing it shall be '2'-fucos lactose'.	containing it shall be '2'-fucosyl-			
	Unflavoured fermented milk-based products	1,2 g/l beverages	2. The labelling of food supplements containing 2'-fucosyllactose shall bear a statement that the supplements should not be used if other foods with added 2'-fucosyllactose are consumed the same day.  3. The labelling of food supplements containing 2'-fucosyllactose intended for young children shall bear a statement that the supplements should not be used if breast milk or other foods with added 2'-fucosyllactose are consumed the same day.		
		19,2 g/kg products other than beverages			
	Flavoured fermented milk-based products including heat-treated products	1,2 g/l beverages			
		19,2 g/kg products other than beverages			
	Dairy analogues, including beverage whiteners	1,2 g/l beverages			
		12 g/kg for products other than beverages			
		400 g/kg for whitener			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Cereal bars	12 g/kg			
	Table-top sweeteners	200 g/kg			
	Infant formula as defined in Regulation (EU) No 609/2013	1,2 g/l alone or in combination with up to 0,6 g/l of lacto- <i>N</i> -neotetraose at a ratio of 2:1 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer			
	Follow-on formula as defined in Regulation (EU) No 609/2013	1,2 g/l alone or in combination with up to 0,6 g/l of lacto- <i>N</i> -neotetraose at a ratio of 2:1 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer			
	Processed cereal-based food and baby food for infants and young children as defined in Regulation (EU) No 609/2013	12 g/kg for products other than beverages			
		1,2 g/l for liquid food ready for use, marketed as such or reconstituted as instructed by the manufacturer			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Milk-based drinks and similar products intended for young children	1,2 g/l for milk-based drinks and similar products added alone or in combination with up to 0,6 g/l lacto- <i>N</i> -neotetraose, at a ratio of 2:1 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013	4,8 g/l for drinks			
		40 g/kg for bars			
	Bread and pasta products bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014	60 g/kg			

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Flavoured drinks	1,2 g/l			
	Coffee, tea (excluding black tea), herbal and fruit infusions, chicory; tea, herbal and fruit infusions and chicory extracts; tea, plant, fruit and cereal preparations for infusions, as well as mixes and instant mixes of these products	9,6 g/l — the maximum level refers to the products ready to use			
	Food supplements as defined in Directive 2002/46/EC, excluding food supplements for	3,0 g/day for general population			
	infants	1,2 g/day for young children			
Galacto-oligos- accharide	Specified food category	Maximum levels (expressed as ratio kg galacto-oligosaccharide/kg final food)			
	Food Supplements as defined in Directive 2002/46/EC	0,333			
	Milk	0,020			
	Milk drinks	0,030			
	Meal replacement for weight control (as drinks)	0,020			
	Dairy analogue drinks	0,020			
	Yoghurt	0,033			
	Dairy based deserts	0,043			
	Frozen dairy deserts	0,043			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Fruit drinks and energy drinks	0,021			
	Infant meal replacement drinks	0,012			
	Baby juice	0,025			
	Baby yogurt drink	0,024			
	Baby desert	0,027			
	Baby snack	0,143			
	Baby cereals	0,027			
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen	0,013			
	Juice	0,021			
	Fruit pie fillings	0,059			
	Fruit preparations	0,125			
	Bars	0,125			
	Cereals	0,125			
	Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013	0,008			
Glucosamine HCl	Specified food category	Maximum levels			
	Food Supplements as defined in Directive 2002/46/EC	In line with normal food use of glucosamine from shell fish			
	Foods covered by Regulation (EU) No 609/2013				
	Meal replacement for weight control				

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen				
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014				
Glucosamine	Specified food category	Maximum levels			
sulphate KCl	Food Supplements as defined in Directive 2002/46/EC	In line with normal food use of glucosamine from shell fish			
Glucosamine	Specified food category	Maximum levels			
sulphate NaCl	Food Supplements as defined in Directive 2002/46/EC	In line with normal food use of glucosamine from shell fish			
Guar Gum	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Guar Gum'.      A specific mention of the possible risks of digestive discomfort linked to the exposure of children aged under 8 to guar gum must be visible on		
	Fresh dairy products such as yogurts, fermented milks, fresh cheeses and other dairy-based desserts.	1,5 g/100 g			
	Fruit or vegetable-based liquid foodstuffs (of the 'smoothie' variety)	1,8 g/100 g			
	Fruit or vegetable-based compotes	3,25 g/100 g			
	Cereals accompanied by a dairy product, in packaging containing two compartments	10 g/100 g in the cereals  None in the accompanying dairy product  1 g/100 g in the product when ready to eat	the label of any foodstuffs containing it.  For example, 'Excessive consumption of these products may cause digestive discomfort, especially for children under 8 years of age'.  3. In the case of products with two compartments containing dairy and cereal products respectively, the instructions for use must clearly specify the need to mix the cereal and the dairy product		

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
			before consumption, in order to take into account the potential risk of gastro-intestinal obstruction.		
Heat-treated milk products fermented	Specified food category	Maximum levels			
with Bacteroides xylanisolvens	Fermented milk products (in liquid, semi-liquid and spray-dried powder forms)				
Hydroxytyrosol	Specified food category	Maximum levels	The designation of the novel food on the labelling of the food		
	Fish and vegetable oils, (except olive oils and olive pomace oils as defined in Part VIII of	0,215 g/kg	products containing it shall be 'hydroxytyrosol'.		
	Annex VII of Regulation (EU) No 1308/ 2013 (6)), placed as such on the market		The labelling of the food products containing hydroxytyrosol shall		
	Spreadable fats as defined in Part VII of Annex VII of Regulation (EU) No 1308/2013, placed as such on the market	0,175 g/kg	bear the following statements:  (a) This food product should not be consumed by children under the age of three years, pregnant women, and lactating women;  (b) This food product should not be used for cooking, baking or frying'		
ce Structuring	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Ice Structuring Protein'		
HPLC 12	Edible ices	0,01 %			
Aqueous extracts of dried leaves of <i>Ilex</i>	Specified food category	Maximum levels	ormal use in herbal food supplements of ous extract of dried on the labelling of the foodstuffs containing it shall be 'Extracts of dried leaves of <i>Ilex guayusa</i> '		
guayusa	Herbal infusions	In line with normal use in herbal infusions and food supplements of			
5	Food Supplements as defined in Directive 2002/46/EC	a similar aqueous extract of dried leaves of <i>Ilex paraguariensis</i>			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection
Isomalto-oligos- accharide	Specified food category	Maximum levels	1. The designation of the novel food		
accharide	Energy-Reduced Soft Drinks	6,5 %	on the labelling of the foodstuffs containing it shall be 'Isom-		
	Energy Drinks	5,0 %	altooligosaccharide'.		
	Foods intended to meet the expenditure of intense muscular efforts, especially for sportsmen (including isotonic drinks)	6,5 %	2. Foods containing the novel ingredient must be labelled as 'a source of glucose'.		
	Fruit Juices	5 %			
	Processed Vegetables and Vegetable Juices	5 %			
	Other Soft Drinks	5 %			
	Cereals Bars	10 %			
_	Cookies, Biscuits	20 %			
	Breakfast Cereal Bars	25 %			
	Hard Candies	97 %			
	Soft Candies/Chocolate Bars	25 %			
	Meal replacement for weight control (as bars or milk based)	20 %			
Isomaltulose	Not specified		1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Isomaltulose'.		
			2. The designation of the novel food on the labelling shall be accompanied by indication that the 'Isomaltulose is a source of glucose and fructose'.		
T	Specified food category	Maximum levels			
Lactitol	Food Supplements as defined in Directive	20 g/day	The designation of the novel food on the labelling of the food		
	2002/46/EC (capsules, tablets or powder) intended for the adult population	20 g/uay	supplements containing it shall be 'Lactitol'		

Authorised novel food	Conditions under which the no	vel food may be used	Ado	ditional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Lacto-N-neotetraose	Specified food category	Maximum levels	1.	The designation of the novel food on the labelling of the foodstuffs		
	Unflavoured pasteurised and sterilised (including UHT) milk-based products	0,6 g/l		containing it shall be 'lacto- <i>N</i> -neotetraose'.  The labelling of food		
	Unflavoured fermented milk-based products	0,6 g/l for beverages 9,6 g/kg for products other than beverages	should not be used if other foods with added lacto- <i>N</i> -neotetraose are consumed the same day.  3. The labelling of food supplements containing lacto- <i>N</i> -neotetraose intended for young children shall bear a statement that the supplements should not	neotetraose shall bear a statement that the supplements should not be used if other		
	Flavoured fermented milk-based products including heat-treated products	0,6 g/l for beverages 9,6 g/kg for products other than beverages		rood -N- ung nent not ther -N-		
	Dairy analogues, including beverage whiteners	0,6 g/l for beverages 6 g/kg for products other than beverages 200 g/kg for whitener				
	Cereal bars	6 g/kg				
	Table-top sweeteners	100 g/kg				
	Infant formula as defined in Regulation (EU) No 609/2013	0,6 g/l in combination with up to 1,2 g/l of 2'-fucosyllactose at a ratio of 1:2 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer				
	Follow-on formula as defined in Regulation (EU) No 609/2013	0,6 g/l in combination with up to 1,2 g/l of 2'-fucosyllactose at a ratio of 1:2 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer				

02017R2470 - EN - 14.02.2019 - 007.001 - 37

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Processed cereal-based food and baby food for infants and young children as defined in Regulation (EU) No 609/2013	6 g/kg for products other than beverages 0,6 g/l for liquid food ready for use, marketed as such or reconstituted as instructed by the manufacturer			
	Milk-based drinks and similar products intended for young children	0,6 g/l for milk-based drinks and similar products added alone or in combination with 2'-fucosyllactose, at a ratio of 1:2 in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013	2,4 g/l for drinks 20 g/kg for bars			
	Bread and pasta products bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014	30 g/kg			
	Flavoured drinks	0,6 g/l			

	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
		Coffee, tea (excluding black tea), herbal and fruit infusions, chicory; tea, herbal and fruit infusions and chicory extracts; tea, plant, fruit and cereal preparations for infusions, as well as mixes and instant mixes of these products	4,8 g/l — the maximum level refers to the products ready to use			
		Food supplements as defined in Directive 2002/46/EC, excluding food supplements for infants	1,5 g/day for general population 0,6 g/day for young children			
<b>▼</b> <u>M20</u>						
	Lonicera caerulea L. berries (haskap)	Not specified		The designation of the novel food on the labelling of the foodstuffs		
	(Traditional food from a third country)			containing it shall be 'haskap (Lonicera caerulea) berries'		
<b>▼</b> <u>M9</u>						
	Lucerne leaf extract from <i>Medicago</i>	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	sativa	Food supplements as defined in Directive 2002/46/EC	10 g/day	containing it shall be 'Lucerne (Medicago sativa) protein' or 'Alfalfa (Medicago sativa) protein'.		
	Lycopene	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
		Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g	containing it shall be 'Lycopene'		
		Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen	2,5 mg/100 g			
		Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	8 mg/meal			
		Breakfast cereals	5 mg/100 g			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Fats and dressings	10 mg/100 g			
	Soups other than tomato soups	1 mg/100 g			
	Bread (including crispy breads)	3 mg/100 g			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Food supplements as defined in Directive 2002/46/EC	15 mg/day			
Lycopene from	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lycopene'		
Blakeslea trispora	Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g			
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen	2,5 mg/100 g			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	8 mg/meal			
	Breakfast cereals	5 mg/100 g			
	Fats and dressings	10 mg/100 g			
	Soups other than tomato soups	1 mg/100 g			
	Bread (including crispy breads)	3 mg/100 g			
-	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended	;		
	Food supplements as defined in Directive 2002/46/EC	15 mg/day			

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Lycopene from tomatoes	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g	containing it shall be 'Lycopene'		
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen	2,5 mg/100 g			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control				
	Breakfast cereals	5 mg/100 g			
	Fats and dressings	10 mg/100 g			
	Soups other than tomato soups	1 mg/100 g			
	Bread (including crispy breads)	3 mg/100 g			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Food supplements as defined in Directive 2002/46/EC	15 mg/day			
Lycopene oleoresin from tomatoes	Specified food category	Maximum levels of lycopene	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lycopene oleoresin from tomatoes'		
	Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g		ontaining it shall be 'Lycopene	
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen	2,5 mg/100 g			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Total diet replacement for weight control covered by Regulation (EU) No 609/2013 and meal replacements for weight control	8 mg/meal			
	Breakfast cereals	5 mg/100 g			
	Fats and dressings	10 mg/100 g			
	Soups other than tomato soups	1 mg/100 g			
	Bread (including crispy breads)	3 mg/100 g			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
Magnesium citrate malate	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Magnesium citrate malate'		
manace	Food Supplements as defined in Directive 2002/46/EC				
Magnolia Bark Extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
Extract	Mints (confectionary products)	0,2 % for breath freshening purposes. Based on a 0,2 %	containing it shall be 'Magnolia Bark Extract'		
	Chewing gum	maximum incorporation level and a maximum gum/mint size of 1,5 g each, each gum or mint serving will contain no more than 3 mg of magnolia bark extract.			
	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food Supplements as defined in Directive 2002/46/EC	2 g/day	containing it shall be 'Maize-germ oil extract'		
	Chewing gum	2 %			

**▼**M9

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Aut	uthorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Met	thylcellulose	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs	is not to be	
		Edible ices	2 %	containing it shall be 'Methylcel- lulose'	used in foods specially prepared for	
		Flavoured drinks			young children	
		Flavoured or unflavoured fermented milk products				
		Cold desserts (dairy, fat, fruit, cereal, egg-based products)				
		Fruit preparations (pulps, purees or compotes)				
		Soups and broths				
11						
	1ethylnicoti- nide chloride	Specified food category  Food Supplements as defined in Directive 2002/46/EC for the adult population excluding pregnant and lactating women	Maximum levels 58 mg/day	The designation of the novel food on the labelling of the foodstuffs containing it shall be '1- Methylnicotinamide chloride'.  Food supplements containing 1- Methylnicotinamide shall bear the following statement:  This food supplement should be consumed by adults only excluding pregnant and lactating women		Authorised on 2 Septem 2018. This inclusion is base on proprietary scient evidence and scientific deprotected in accordance warticle 26 of Regulation (E 2015/2283.  Applicant: Pharmena September 2015/2283.  Applicant: Pharmena September 2015/2283.

**▼**<u>M11</u>

	Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
						novel food 1-methylnico namide chloride is authoris for placing on the mark within the Union only Pharmena S.A. unless subsequent applicant obtain authorisation for the novel food without reference to the proprietary scientific eviden or scientific data protected accordance with Article 26 Regulation (EU) 2015/223 or with the agreement Pharmena S.A.  End date of the day protection: 2 September 202
7 <u>M9</u>	(6S)-5-methyltet- rahydrofolic acid, glucosamine salt	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be '(6S)-5-methyltetrahydrofolic acid, glucosamine salt' or '5MTHF-glucosamine'		
		Food Supplements as defined in Directive 2002/46/EC as a source of folate				
	Monomethylsil- anetriol (Organic	Specified food category	Maximum levels of silicon	The designation of the novel food on the labelling of the food supplements containing it shall be		
	Silicon)	Food Supplements as defined in Directive 2002/46/EC for adult population (in liquid form)	10,40 mg/day	'Organic silicon (monomethylsilanetriol)'		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Mycelial extract	Specified food category	Maximum levels	The designation of the novel food		
from Shiitake mushroom ( <i>Len</i> -	Bread products	2 ml/100 g	on the labelling of the foodstuffs containing it shall be 'extract from		
tinula edodes)	Soft drinks	0,5 ml/100 ml	the mushroom <i>Lentinula edodes</i> ' or 'extract from Shiitake mushroom'		
	Ready prepared meals	2,5 ml per meal			
	Foods based on yoghurt	1,5 ml/100 ml	1		
	Food supplements as defined in Directive 2002/46/EC	2,5 ml per day dose			
Noni fruit juice (Morinda citrifolia)	Specified food category	Maximum levels	The designation of the novel food		
	Pasteurised fruit and fruit nectar based drinks	30 ml with one serving (up to 100 % noni juice)	on the labelling of the foodstuffs containing it shall be 'Noni juice' or 'Juice of <i>Morinda citrifolia</i> '		
	or 20 ml twice a day, not more than 40 ml per day				
Noni fruit juice powder (Morinda citrifolia)	Food supplements as defined in Directive 2002/46/EC	6,6 g/day (equivalent to 30 ml of noni juice)	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Noni juice powder' or 'Juice powder of Morinda citrifolia'		
Noni fruit puree	Specified food category	Maximum levels	The designation of the novel food		
and concentrate ( <i>Morinda citrifolia</i> )		Fruit puree	on the labelling of the foodstuffs containing it shall be:		
	Candy/confectionery	45 g/100 g	For fruit puree:		
	Cereal bars	53 g/100 g	'Morinda citrifolia fruit puree' or		
	Powdered nutritional drink mixes (dry weight)	53 g/100 g	'Noni fruit puree' For fruit concentrate:		
	Carbonated beverages	11 g/100 g	'Morinda citrifolia fruit concentrate' or 'Noni fruit concentrate'		
	Ice cream & sorbet	31 g/100 g	o. Nom man concentrate		
	Yoghurt	12 g/100 g			
	Biscuits	53 g/100 g			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Buns, cakes and pastries	53 g/100 g			
	Breakfast cereals (wholegrain)	88 g/100 g			
	Jams and jellies in accordance with Directive 2001/113/EC	133 g/100 g			
	2001/113/EC	Based on pre-processing quantity to produce final 100 g product			
	Sweet spreads, fillings and icings	31 g/100 g			
	Savoury sauces, pickles, gravies and condiments	88 g/100 g			
	Food Supplements as defined in Directive 2002/46/EC	26 g/day			
		Fruit concentrate			
	Candy/Confectionery	10 g/100 g			
	Cereal bars	12 g/100 g			
	Powdered nutritional drink mixes (dry weight)	12 g/100 g			
	Carbonated beverages	3 g/100 g			
	Ice cream & sorbet	7 g/100 g			
	Yoghurt	3 g/100 g			
	Biscuits	12 g/100 g			
	Buns, cakes and pastries	12 g/100 g			
	Breakfast cereals (wholegrain)	20 g/100 g			
	Jams and jellies in accordance with Directive 2001/113/EC	30 g/100 g			
	Sweet spreads, fillings and icings	7 g/100 g			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Savoury sauces, pickles, gravies and condiments	20 g/100 g			
	Food Supplements as defined in Directive 2002/46/EC	6 g/day			
Noni leaves (Morinda citrifolia)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
(normal cargona)	For the preparation of infusions	A cup of infusion to be consumed shall not be prepared with more than 1 g of dried and roasted leaves of Morinda citrifolia	containing it shall be 'Noni leaves' or 'leaves of <i>Morinda citrifolia</i> '.  2. Instructions shall be given to the consumer that a cup of infusion should not be prepared with more than 1 g of dried and roasted leaves of Morinda citrifolia.		
Noni fruit powder (Morinda citrifolia)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Morinda citrifolia fruit powder' or 'Noni fruit powder'		
(normal caryona)	Food Supplements as defined in Directive 2002/46/EC	2,4 g per/day			
Odontella aurita microalgae	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
mici vaigae	Flavoured pasta	1,5 %	containing it shall be 'Odontella aurita microalgae'		
	Fish soups	1 %			
	Marine terrines	0,5 %			
	Broth preparations	1 %			
(	Crackers	1,5 %			
	Frozen breaded fish	1,5 %			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Oil enriched with phytosterols/phytostanols	Specified food category	Maximum levels of phytosterols/ phytostanols	In accordance with Annex III.5 to Regulation (EU) No 1169/2011		
	Spreadable fats as defined in Annex VII, Part VII and Appendix II, points B and C of Regulation (EU) No 1308/2013, and excluding cooking and frying fats and spreads based on butter or other animal fat	novel food ingredient shall be presented in such a manner that they can be easily divided into portions that contain either a maximum of 3 g (in case of one portion per day) or a maximum			
	Milk based products, such as products based on semi-skimmed and skimmed milk products, possibly with the addition of fruits and/or cereals, products based on fermented milk such as yoghurt and cheese based products (fat content ≤ 12 g per 100 g), where possibly the milk fat has been reduced and the fat or protein has been partly or fully replaced by vegetable fat or protein	of 1 g (in case of three portions per day) of added phytosterols/ phytostanols.  2. The amount of phytosterols/ phytostanols added to a container of beverages shall not exceed 3 g.  3. Salad dressings, mayonnaise and spicy sauces shall be packed as single portions.			
	Soya drinks				
	Salad dressings, mayonnaise and spicy sauces				

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Oil extracted from squids		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Squid oil'			
	Dairy products except milk-based beverages	200 mg/100 g or for cheese products 600 mg/100 g	Containing it shall be squid on .	containing it shall be squid on .	
	Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/			
	Spreadable fat and dressings	600 mg/100 g			
	Breakfast cereals	500 mg/100 g			
	Bakery products (breads and bread rolls)	200 mg/100 g			
	Cereal bars	500 mg/100 g			
	Non-alcoholic beverages (including milk-based beverages)	60 mg/100 ml			
	Food Supplements as defined in Directive 2002/46/EC	3 000 mg/day for general population 450 mg/day for pregnant and lactating women			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products intended			
	Total diet replacement for weight control defined in Regulation (EU) No 609/2013 and meal replacements for weight control	200 mg/meal			
Pasteurised	Specified food category	Maximum levels	The wording 'pasteurised by high-pressure treatment' shall be		
fruit-based prep- arations produced using high-pressure treatment	Types of fruit:  apple, apricot, banana, blackberry, blueberry, cherry, coconut, fig, grape, grapefruit, mandarin, mango, melon, peach, pear, pineapple, prune, raspberry, rhubarb, strawberry		displayed next to the name of the fruit preparations as such and in any product in which it is used	ayed next to the name of the preparations as such and in	

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Phosphated maize starch	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
startii	Baked bakery products	15 %	containing it shall be 'Phosphated maize starch'		
	Pasta		maize saren		
	Breakfast cereals				
	Cereal bars				
Phosphatidylserine from fish phosp- holipids	phosp-  Specified Jood category  dylserine  on the labelling of the foodstuff containing it shall be 'Fish phose	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Fish phos-			
попри	Beverages based on yoghurt	50 mg/100 ml	phatidylserine'		
	Powders based on milk powders	3 500 mg/100 g (equivalent to 40 mg/100 ml ready to drink)			
	Foods based on yoghurt	80 mg/100 g			
	Cereal bars	350 mg/100 g			
	Chocolate based confectionary	200 mg/100 g			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In compliance with Regulation (EU) No 609/2013			
	Food supplements as defined in Directive 2002/46/EC	300 mg/day			
Phosphatidylserine from soya phosp- holipids	Specified food category	Maximum levels of phosphati- dylserine	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Soya phos-		
nonpias	Beverages based on yoghurt	50 mg/100 ml	phatidylserine'		
	Powders based on milk powder	3,5 g/100 g (equivalent to 40 mg/100 ml ready to drink)			
	Foods based on yoghurt	80 mg/100 g			
	Cereal bars	350 mg/100 g			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Chocolate based confectionary	200 mg/100 g			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In compliance with Regulation (EU) No 609/2013			
Phospholipid product containing equal amounts of phosphatidylserine and phosphatidic acid	Specified food category	Maximum levels of phosphati- dylserine	The designation of the novel food on the labelling of the foodstuffs containing shall be 'Soy phosphati-	The product is not intended to be marketed to pregnant or breast-feeding women	
	Breakfast cereals	80 mg/100 g	dylserine and phosphatidic acid'		
	Cereal bars	350 mg/100 g			
	Foods based on yogurt	80 mg/100 g			
	Soy-based yogurt-like products	80 mg/100 g			
	Yogurt based-drinks	50 mg/100 g			
	Soy-based yogurt-like drinks	50 mg/100 g			
	Powders based on milk powder	3,5 g/100 g (equivalent to 40 mg/100 ml ready-to drink)			
	Food Supplements as defined in Directive 2002/46/EC	800 mg/day			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In compliance with Regulation (EU) No 609/2013			
Phospholipides from egg yolk	Specified food category	Maximum levels			
nom egg york	Not specified				
Phytoglycogen	Specified food category	Maximum levels	The designation of the novel food		
	Processed foods	25 %	on the labelling of the foodstuffs containing it shall be 'Phytoglycogen'		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Phytosterols/ phytostanols	Specified food category	Maximum levels	In accordance with Annex III.5 of Regulation (EU) No 1169/2011		
	Rice drinks	3 g (in case of 1 portion/day) or a maximum of 1 g (in case of 3 portions/day) of added phytosterols/phytostanols.  The amount of phytosterols/phytostanols added to a container of beverages shall not exceed 3 g.  Salad dressings, mayonnaise and spicy sauces shall be packed as single portions			
	Rye bread with flour containing $\geq 50$ % rye (wholemeal rye flour, whole or cracked rye kernels and rye flakes) and $\leq 30$ % wheat; and with $\leq 4$ % added sugar but no fat added.				
	Salad dressings, mayonnaise and spicy sauces.				
	Soya drink				
	Milk type products, such as semi-skimmed and skimmed milk type products, possibly with the addition of fruits and/or cereals, where possibly the milk fat has been reduced, or where milk fat and/or protein has been partly or fully replaced by vegetable fat and/or protein.				
	Products based on fermented milk such as yoghurt and cheese type products (fat content < 12 % per 100 g), where possibly the milk fat has been reduced, or where milk fat and/or protein has been partly or fully replaced by vegetable fat and/or protein				
	Spreadable fats as defined in Annex VII, Part VII and Appendix II, points B and C of Regulation (EU) No 1308/2013, and excluding cooking and frying fats and spreads based on butter or other animal fat.				
	Food Supplements as defined in Directive 2002/46/EC	3 g/day			

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Plum kernel oil	Specified food category	Maximum levels			
	For frying and as seasoning	In line with normal food use of vegetable oils			
Potato proteins (coagulated) and nydrolysates thereof	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Potato protein'		
Prolyl oligopep- idase (enzyme	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Prolyl oligo- peptidase'		
preparation)	Food Supplements as defined in Directive 2002/46/EC for general adult population	120 PPU/day (2,7 g of enzyme preparation/day) (2 × 10 <sup>6</sup> PPI/day)			
		PPU – Prolyl Peptidase Units or Proline Protease Units			
		PPI – Protease Picomole International			
Protein extract From pig kidneys	Specified food category	Maximum levels			
	Food Supplements as defined in Directive 2002/46/EC	3 capsules/day; equalizing 12,6 mg pig kidney extract a day Diamine oxidase (DAO) content: 0,9 mg/day (3 capsules with a content of DAO of 0,3 mg/capsule)			
	Food for special medical purposes as defined in Regulation (EU) No 609/2013				

## **▼**<u>M9</u>

Authorised novel food  Pyrroloquinoline quinone disodium salt  Specified food category  Food Supplements as defined in Directive 2002/46/EC intended for the adult population, excluding pregnant and lactating women  Maximum levels  20 mg/day	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Pyrroloquinoline quinone disodium salt'.  The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Pyrroloquinoline quinone disodium salt'.  Authorised on 2018. This is based on scientific evi scientific data accordance with of Regulation of Regulation 2283.
Pyrroloquinoline quinone disodium salt  Specified food category Maximum levels  Food Supplements as defined in Directive 2002/46/EC intended for the adult population,	on the labelling of the foodstuffs containing it shall be 'Pyrroloquinoline quinone disodium salt'.  Food supplements containing Pyrroloquinoline quinone disodium salt of Regulation
	shall bear the following statement:  This food supplement should be consumed by adults only excluding pregnant and lactating women  Applicant: Mit Chemical Con Mitsubishi Bu Marunouchi Chiyoda-ku, 8324, Japan. period of data provel food Pyr quinone disodium orised for plan market within the by Mitsubishi Company, Inc. subsequent apple authorisation for food without reference or scientific data accordance with Regulation (EU or with the a Mitsubishi Ga Company, Inc.  End date of

**▼**<u>M9</u>

	Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Rapeseed oil high in unsaponifiable	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	matter	Food Supplements as defined in Directive 2002/46/EC	1,5 g per portion recommended for daily consumption	containing it shall be 'Rapeseed oil extract'		
	Rapeseed Protein	As a vegetable protein source in foods except in infant formula and follow-on formula		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Rapeseed protein'.      Any foodstuff containing 'rapeseed protein' shall bear a statement that this ingredient may cause allergic reaction to consumers who are allergic to mustard and products thereof. Where relevant, this statement shall appear in close proximity to the list of ingredients.		
▼ <u>M17</u>	Refined shrimp peptide concentrate	Specified food category  Food Supplements as defined in Directive 2002/46/EC for the adult population	Maximum levels 1 200 mg/day	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'refined shrimp peptide concentrate'.		Authorised on 20 November 2018. This inclusion is based on proprietary scientific evidence and scientific data protected in accordance with Article 26 of Regulation (EU) 2015/2283.  Applicant: Marealis AS., Stortorget 1, Kystens Hus, 2nd floor, N-9008 Tromsø
						Postal address: P.O. Box 1065, 9261 Tromsø, Norway. During the period of data protection the novel food refined shrimp peptide

**▼**<u>M17</u>

	Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
						concentrate is authorised for placing on the market within the Union only by Marealis AS unless a subsequent applicant obtains authorisation for the novel food without reference to the proprietary scientific evidence or scientific data protected in accordance with Article 26 of Regulation (EU) 2015/2283 or with the agreement of Marealis AS.  End date of the data protection: 20 November 2023.
<b>▼</b> <u>M9</u>	Trans-resveratrol	Specified food category	Maximum levels	The designation of the novel food		
	Trans-resveración	Food Supplements as defined in Directive 2002/46/EC for adult population (capsule or tablet form)	150 mg/day	on the labelling of the food supplements containing it shall be ' <i>Trans</i> -resveratrol'.  2. The labelling of food supplements containing trans-resveratrol shall bear a statement that people using medicines should only consume the product under medical supervision.		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Trans-resveratrol (microbial source)	Specified food category  Food supplements as defined in Directive 2002/46/EC	Maximum levels  In line with normal use in food supplements of resveratrol extracted from Japanese knotweed (Fallopia japonica)	The designation of the novel food on the labelling of the food supplements containing it shall be 'Trans-resveratrol'.      The labelling of food supplements containing trans-resveratrol shall bear a statement that people using medicines should only consume the product under medical supervision.		
Rooster comb extract	Specified food category  Milk-based drinks	Maximum levels 40 mg/100 g or mg/100 ml	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Rooster		
		comb extract' or 'Cockerel comb			
Sacha inchi oil from Plukenetia volubilis	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
Timenetia voidonis	As for linseed oil	In line with normal food use of linseed oil	containing it shall be 'Sacha inchi oil (Plukenetia volubilis)'		
Salatrims	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Bakery products and confectionary		on the labeling of the loodsturis containing it shall be 'reduced energy fat (salatrims)'.  2. There shall be a statement that excessive consumption may lead to gastro-intestinal disturbance.  3. There shall be a statement that the products are not intended for use by children.		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Schizochytrium sp. oil rich in DHA and EPA	Specified food category	Maximum levels of DHA and EPA combined:	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'DHA and EPA-rich oil from the microalgae Schizochytrium sp.'		
Z1 X	Food Supplements as defined in Directive 2002/46/EC for adult population excluding pregnant and lactating women	3 000 mg/day			
	Food Supplements as defined in Directive 2002/46/EC for pregnant and lactating women	450 mg/day			
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal			
	Milk-based drinks and similar products intended for young children	200 mg/100 g			
	Processed cereal based food and baby food for infants and young children as defined in Regulation (EU) No 609/2013				
	Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen				
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014				
	Bakery Products (Breads, Rolls and Sweet Biscuits)	200 mg/100 g			
	Breakfast Cereals	500 mg/100 g			
	L	1	J	ı 1	

02017R2470 — EN — 14.02.2019 — 007.001 — 58

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Cooking Fats	360 mg/100 g			
	Dairy Analogues except drinks	600 mg/100 g for cheese; 200 mg/ 100 g for soy and imitation milk products (excluding drinks)			
	Dairy Products except milk-based drinks	600 mg/100 g for cheese; 200 mg/ 100 g for milk products (including milk, fromage frais and yoghurt products; excluding drinks)			
	Non-alcoholic Beverages (including dairy analogue and milk-based drinks)	80 mg/100 g			
	Cereal/Nutrition Bars	500 mg/100 g			
	Spreadable Fats and Dressings	600 mg/100 g			
Schizochytrium sp. (ATCC PTA-9695) oil	Specified food category	Maximum levels of DHA	microalgae Schizochytrium sp. (ATCC PTA-9695)'		
	Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g			
	Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/			
	Spreadable fats and dressings	600 mg/100 g			
	Breakfast cereals	500 mg/100 g			
	Food Supplements as defined in Directive 2002/46/EC	250 mg DHA/day for general population			
		450 mg DHA/day for pregnant and lactating women			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal			

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Milk-based drinks and similar products intended for young children	200 mg/100 g			
	Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen				
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014				
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Bakery products (breads,rolls, and, sweet biscuits)	200 mg/100 g			
	Cereal bars	500 mg/100 g			
	Cooking fats	360 mg/100 g			
	Non-alcoholic beverages (including dairy analogue and milk-based drinks)	80 mg/100 ml			
	Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013	In accordance with Regulation (EU) No 609/2013			
	Processed cereal-based foods and baby foods for infants and young children as defined in Regulation (EU) No 609/2013	200 mg/100 g			

	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
<u>M24</u>						
	Schizochytrium sp.	Specified food category	Maximum levels of DHA	The designation of the novel food on the labelling of the foodstuffs		
		Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g	- The second control of the second control o		
		Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/100 g			
		Spreadable fat and dressings	600 mg/100 g			
		Breakfast cereals	500 mg/100 g			
		Food Supplements as defined in Directive 2002/46/EC	250 mg DHA/day for general population			
			450 mg DHA/day for pregnant and lactating women			
		Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal			
		Milk-based drinks and similar products intended for young children	200 mg/100 g			
		Processed cereal-based foods and baby foods for infants and young children as defined in Regulation (EU) No 609/2013				
		Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen				
			1	1	1	

02017R2470 - EN - 14.02.2019 - 007.001 - 61

**▼**<u>M24</u>

	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
-		Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Implementing Regulation (EU) No 828/2014				
		Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
		Bakery products (breads, rolls, and, sweet biscuits)	200 mg/100 g			
		Cereal bars	500 mg/100 g			
		Cooking fats	360 mg/100 g			
		Non-alcoholic beverages (including dairy analogue and milk-based drinks)	80 mg/100 ml			
<u>-</u>		Fruit/vegetable puree	100 mg/100 g			
▼ <u>M9</u>						
	<i>Schizochytrium</i> sp. (T18) oil	Specified food category	Maximum levels of DHA	The designation of the novel food on the labelling of the foodstuffs		
		Dairy products except milk-based drinks	200 mg/100 g or for cheese products 600 mg/100 g	containing it shall be 'Oil from the microalgae <i>Schizochytrium</i> sp.'		
		Dairy analogues except drinks	200 mg/100 g or for analogues to cheese products 600 mg/			
		Spreadable fats and dressings	600 mg/100 g			
		Breakfast cereals	500 mg/100 g			
		Spreadable fats and dressings	cheese products 600 mg/ 100 g 600 mg/100 g			

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
	Food Supplements as defined in Directive 2002/46/EC	250 mg DHA/day for general population			
		450 mg DHA/day for pregnant and lactating women			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013 and meal replacements for weight control	250 mg/meal			
	Milk-based drinks and similar products intended for young children	200 mg/100 g			
	Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen				
	Foods bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014				
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	In accordance with the particular nutritional requirements of the persons for whom the products are intended			
	Bakery products (breads, rolls and, sweet biscuits)	200 mg/100 g			
	Cereal bars	500 mg/100 g			

	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
		Cooking fats	360 mg/100 g			
		Non-alcoholic beverages (including dairy analogue and milk-based drinks)	80 mg/100 ml			
		Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013	In accordance with Regulation (EU) No 609/2013			
		Processed cereal-based foods and baby foods for infants and young children as defined in Regulation (EU) No 609/2013	200 mg/100 g			
▼ <u>M22</u>	Syrup from Sorghum bicolor (L.) Moench (Traditional food from a third country)	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Sorghum (Sorghum bicolor) syrup'		
▼ <u>M9</u>	Fermented soybean extract	Specified food category  Food Supplements as defined in Directive 2002/46/EC (capsules, tablets or powder form) intended for the adult population, excluding pregnant and lactating women	Maximum levels  100 mg/day	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Fermented soybean extract'.      The labelling of food supplements containing fermented soybean extract shall bear a statement that persons taking medication should only consume the product under medical supervision.		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Spermidine-rich wheat germ extract ( <i>Triticum aestivum</i> )	Specified food category	Maximum levels	The designation of the novel food on the labelling of the food		
	Food Supplements as defined in Directive 2002/46/EC intended for the adult population, excluding pregnant and lactating women	Equivalent of max. 6 mg/day spermidine	supplements containing it shall be 'spermidine-rich wheat germ extract'		
Sucromalt	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Not specified		containing it shall be 'Sucromalt'.		
			2. The designation of the novel food on the labelling shall be accompanied by indication that the product is a source of glucose and fructose.		
Sugar cane fibre	Specified food category	Maximum levels			
	Bread	8 %			
	Bakery goods	5 %			
	Meat and muscle products	3 %			
	Seasonings and spices	3 %			
	Grated cheeses	2 %			
	Special diet foods	5 %			
	Sauces	2 %			
	Beverages	5 %			
Sunflower oil extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
CAU ACT	Food Supplements as defined in Directive 2002/46/EC	1,1 g/day	on the labelling of the foodstuffs containing it shall be 'Sunflower oil extract'		

Authorised novel food	novel food Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Dried Tetraselmis chuii microalgae	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
J	Sauces	20 % or 250mg/day	containing it shall be 'Dried microalgae <i>Tetraselmis chuii</i> ' or 'Dried microalgae <i>T. chuii</i> '		
	Special salts	1 %	Food supplements containing dried microalgae <i>Tetraselmis chuii</i> shall		
	Condiment	250 mg/day	bear the following statement: 'Contains negligible amounts of iodine'		
	Food Supplements as defined in Directive 2002/46/EC	250 mg/day			
Therapon barcoo/ Scortum	Intended use identical to that of the salmon, no products and dishes, including cooked, raw, st				
D-Tagatose	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Not specified		containing it shall be 'D-Tagatose'.  2. The labelling of any product where the level of D-Tagatose exceeds 15 g per serving and all beverages containing greater than 1 % D-Tagatose (as consumed) shall bear a statement 'excessive consumption may produce laxative effects'.		
Taxifolin-rich extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Food Supplements as defined in Directive 2002/46/EC intended for the general population, excluding infants, young children, children and adolescents younger than 14 years	100 mg/day	containing it shall be 'taxifolin-rich extract'.		

## **▼**<u>M9</u>

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Trehalose	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Trehalose'		
	Not specified		and shall be displayed on the labelling of the product as such or in the list of ingredients of foodstuffs containing it.  2. The designation of the novel food on the labelling shall be accompanied by indication that the 'Trehalose is a source of glucose'.		
UV-treated mushrooms (Agaricus bisporus)	Specified food category	Maximum levels of vitamin $D_2$			
(Aguireus Osporus)	Mushrooms (Agaricus bisporus)	$10~\mu g$ of vitamin $D_2/100~g$ fresh weight	<ol> <li>The designation on the label of the novel food as such or of the foodstuffs containing it shall be 'UV-treated mushrooms (Agaricus bisporus)'.</li> <li>The designation on the label of the novel food as such or of the foodstuffs containing it shall be accompanied by indication that a 'controlled light treatment was used to increase vitamin D levels' or 'UV treatment was used to increase vitamin D<sub>2</sub> levels'.</li> </ol>		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
UV-treated baker's yeast (Sacchar-	Specified food category	Maximum levels of vitamin $D_2$	The designation of the novel food on the labelling of the foodstuffs		
omyces cerevisiae)	Yeast-leavened breads and rolls	5 μg of vitamin D <sub>2</sub> /100 g	containing it shall be 'Vitamin D yeast' or 'Vitamin D <sub>2</sub> yeast'		
	Yeast-leavened fine bakery wares	5 μg of vitamin D <sub>2</sub> /100 g			
	Food Supplements as defined in Directive 2002/46/EC	5 μg of vitamin D <sub>2</sub> /day			
UV-treated bread	Specified food category	Maximum levels of vitamin $D_2$	The designation on the label of the novel food shall be accompanied by 'contains vitamin D produced by UV-treatment'		
	Yeast leavened bread and rolls (without toppings)	3 μg vitamin D <sub>2</sub> /100 g			
UV-treated milk	Specified food category	Maximum levels of vitamin $D_3$	an amount of vitamin D that is considered significant in		
	Pasteurised whole milk as defined in Regulation (EU) No 1308/2013 to be consumed as such	5-32 μg/kg for general population excluding infants			
	Pasteurised semi-skimmed milk as defined in Regulation (EU) No 1308/2013 to be consumed as such	1-15 μg/kg for general population excluding infants	accordance with Point 2 of Part A of Annex XIII to Regulation (EU) No 1169/2011 of the European Parliament and of the Council, the designation for the labelling shall be accompanied by 'contains vitamin D produced by UV-treatment' or 'milk containing vitamin D resulting from UV-treatment'.		

Authorised novel food	vel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀		
Vitamin K <sub>2</sub> (quinone)	mena-	To be used in compliance with Directive and/or Regulation (EC) No 1925/2006	2002/46/EC, Regulation (EU) No 609/2013	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Menaquinone' or 'Vitamin K <sub>2</sub> '				
Wheat bran	extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs	The 'Wheat Bran Extract' may not be introduced onto the market as a food supple- ment or food supplement ingredient. Nor may it be added to infant formula.			
		Beer and substitutes	0,4 g/100 g	containing it shall be 'Wheat bran		may not be	may not be	
		Ready to eat cereals	9 g/100 g	extract'				
		Dairy products	2,4 g/100 g					
		Fruit and vegetable juices	0,6 g/100 g					
		Soft drinks	0,6 g/100 g					
		Meat preparations	2 g/100 g					
Yylo-oligos- accharides	o-oligos-	Specified food category	Maximum levels (**)	The designation of the novel food				
accuariues		White bread	14 g/kg	on the labelling of the foodstuffs containing it shall be 'Xylo-oligos-				
		Whole meal bread	14 g/kg	accharides'				
		Breakfast cereals	14 g/kg					
		Biscuits	14 g/kg					
		Soy drink	3,5 g/kg					
		Yoghurt (*)	3,5 g/kg					
		Fruit spreads	30 g/kg					
		Chocolate confectionery	30 g/kg					
		(*) When used in milk products xylo-oligosa any milk constituent (**) Maximum levels calculated on the basis	accharides shall not replace, in whole or in part, of the specifications of Powder form 1.					

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
Yeast beta-glucans	Specified food category	Maximum levels of pure beta-glucans from yeast (Sacchar- omyces cervisiae)	-		
	Food supplements as defined in Directive 2002/46/EC, excluding food supplements for infants and young children	1,275 g/day for children older than 12 years and general adult popu- lation 0,675 g/day for children younger than 12 years			
	Total diet replacement for weight control as defined in Regulation (EU) No 609/2013	1,275 g/day			
	Food for special medical purposes as defined in Regulation (EU) No 609/2013, excluding food for special medical purposes intended for infants and young children	1,275 g/day			
	Beverages based on fruit and/or vegetable juices including concentrate and dehydrated juices	1,3 g/kg			
	Fruit-flavoured drinks	0,8 g/kg			
	Cocoa beverages preparation powder	38,3 g/kg (powder)			
	Other beverages	0,8 g/kg (ready to drink)			
		7 g/kg (powder)	-		
	Cereal bars	6 g/kg			
	Breakfast cereals	15,3 g/kg			
	Wholegrain and high fibre instant hot breakfast cereals	1,5 g/kg			
	Cookie-type biscuits	6,7 g/kg			

	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M18</u> Data Protection ◀
-		Cracker-type biscuits	6,7 g/kg			
		Milk based beverages	3,8 g/kg			
		Fermented milk products	3,8 g/kg			
		Milk product analogues	3,8 g/kg			
		Dried milk/milk powder	25,5 g/kg			
		Soups and soup mixes	0,9 g/kg (ready to eat)			
			1,8 g/kg (condensed)			
			6,3 g/kg (powder)	1		
		Chocolate and confectionery	4 g/kg	1		
		Protein bars and powders	19,1 g/kg			
		Jam, marmalade and other fruit spreads	11,3 g/kg			
12						
7	Zeaxanthin	Specified food category	Maximum levels	The designation of the novel food		
		Food Supplements as defined in Directive 2002/46/EC	2 mg/day	on the labelling of the foodstuffs containing it shall be 'Zeaxanthin'.		
9						
7	Zinc L-pidolate	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
		Foods covered by Regulation (EU) No 609/2013	3 g/day	containing it shall be 'Zinc L-pidolate'		
		Milk based drinks and similar products intended for young children				
		Meal replacement for weight control				
		Foods intended to meet the expenditure of intense muscular effort, especially for sportsmen				

Authorised novel food	ood bearing statement on the absence or duced presence of gluten in accordance ith the requirements of Commission Imple-		Additional specific labelling requirements	Other requirements	►M18 Data Protection ◀
	Food bearing statement on the absence or reduced presence of gluten in accordance with the requirements of Commission Implementing Regulation (EU) No 828/2014				
	Food Supplements as defined in Directive 2002/46/EC				
	09/2013 of the European Parliament and of the Council				

- (¹) Regulation (EU) No 609/2013 of the European Parliament and of the Council of 12 June 2013 on food intended for infants and young children, food for special medical purposes, and total diet replacement for weight control and repealing Council Directive 92/52/EEC, Commission Directives 96/8/EC, 1999/21/EC, 2006/125/EC and 2006/141/EC, Directive 2009/39/EC of the European Parliament and of the Council and Commission Regulations (EC) No 41/2009 and (EC) No 953/2009 (OJ L 181, 29.6.2013, p. 35).
- (2) Commission Implementing Regulation (EU) No 828/2014 of 30 July 2014 on the requirements for the provision of information to consumers on the absence or reduced presence of gluten in food (OJ L 228, 31.7.2014, p. 5).
- (3) Directive 2002/46/EC of the European Parliament and of the Council of 10 June 2002 on the approximation of the laws of the Member States relating to food supplements (OJ L 183, 12.7.2002, p. 51).
- (4) Regulation (EC) No 1925/2006 of the European Parliament and of the Council of 20 December 2006 on the addition of vitamins and minerals and of certain other substances to foods (OJ L 404, 30.12.2006, p. 26).
- (5) Council Directive 2001/113/EC of 20 December 2001 relating to fruit jams, jellies and marmalades and sweetened chestnut purée intended for human consumption (OJ L 10, 12.1.2002, p. 67).
- (6) Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulation (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) 1234/2007 (OJ L 347, 20.12.2013, p. 671).

## **Table 2: Specifications**

Authorised Novel Food	Specifications
/-Acetyl-D-neuraminic acid	Description:
	N-Acetyl-D-neuraminic acid is a white to off-white crystalline powder
	Definition:
	Chemical name:
	IUPAC names:
	N-Acetyl-D-neuraminic acid (dihydrate)
	5-Acetamido-3,5-dideoxy-D-glycero-D-galacto-non-2-ulopyranosonic acid (dihydrate)
	Synonyms:
	Sialic acid (dihydrate)

Chemical formula:
$C_{11}H_{19}NO_9$ (acid)
$C_{11}H_{23}NO_{11}$ ( $C_{11}H_{19}NO_9 * 2H_2O$ ) (dihydrate)
Molecular mass:
309,3 Da (acid)
345,3 (309,3 + 36,0) (dihydrate)
CAS No.:
131-48-6 (free acid)
50795-27-2 (dihydrate)
Specifications:
Description: white to off-white crystalline powder
pH (20 °C, 5 % solution): 1,7 – 2,5
N-Acetyl-D-neuraminic acid (dihydrate): > 97,0 %
Water (dihydrate calculates to 10,4 %): ≤ 12,5 % (w/w)
Ash, sulphated: $< 0.2 \%$ (w/w)
Acetic acid (as free acid and/or sodium acetate): < 0,5 % (w/w)
Heavy Metals:
Iron: < 20,0 mg/kg
Lead: < 0,1 mg/kg
Residual proteins: < 0,01 % (w/w)
Residual solvents:
2-Propanol: < 0,1 % (w/w)
Acetone: $< 0.1 \% (w/w)$
Ethyl acetate: $< 0.1 \%$ (w/w)
Microbiological criteria:
Salmonella: Absence in 25 g
Aerobic mesophilic total count:< 500 CFU/g

Specifications

Authorised Novel Food	Specifications
	Enterobacteriaceae: Absence in 10 g
	Cronobacter (Enterobacter) sakazakii: Absence in 10 g
	Listeria monocytogenes: Absence in 25 g
	Bacillus cereus: < 50 CFU/g
	Yeasts: < 10 CFU/g
	Moulds: < 10 CFU/g
	Residual endotoxins: < 10 EU/mg
	CFU: Colony Forming Units; EU: Endotoxin Units.
Adansonia digitata (Baobab) dried	Description/Definition:
fruit pulp	The Baobab ( <i>Adansonia digitata</i> ) fruits are harvested from trees. The hard shells are cracked open and the pulp is separated from the seeds and the shell. This is milled, separated into coarse and fine lots (particle size 3 to $600 \mu$ ) and then packaged.
	Typical nutritional components:
	Moisture (loss on drying) (g/100 g): 4,5-13,7
	Protein (g/100 g): 1,8-9,3
	Fat (g/100 g): 0-1,6
	Total carbohydrate (g/100 g): 76,3-89,5
	Total sugars (as glucose): 15,2-36,5
	Sodium (mg/100 g): 0,1-25,2
	Analytical specifications:
	Foreign matter: Not more than 0,2 %
	Moisture (loss on drying) (g/100 g): 4,5-13,7
	Ash (g/100 g): 3,8-6,6
Ajuga reptans extract from cell cultures	Description/Definition:  Hydroalcoholic extract from <i>Ajuga reptans</i> L. tissue cultures which is substantially equivalent to extracts from flowering aerial parts of <i>Ajuga reptans</i> obtained by traditional cultures.

Authorised Novel Food	Specifications
L-Alanyl-L-Glutamine	Description/Definition:
	L-Alanyl-L-Glutamine is produced by fermentation with a genetically modified strain of <i>Escherichia coli</i> . During the fermentation process, the ingredient is secreted into the growth medium from which it is subsequently separated and purified to a concentration of $> 98$ %.
	Appearance: White crystalline powder
	Purity: > 98 %
	Infrared spectroscopy: Conformity with ref. standard
	Appearance of solution: Colourless and clear
	Assay (dry basis): 98-102 %
	Related substances (each): ≤ 0,2 %
	Residue on ignition: $\leq 0.1$ %
	Loss on drying: ≤ 0,5 %
	Optical rotation: +9,0 - +11,0°
	pH (1 %; H <sub>2</sub> O): 5,0-6,0
	Ammonium (NH <sub>4</sub> ): $\leq 0,020 \%$
	Chloride (Cl): ≤ 0,020 %
	Sulphate (SO <sub>4</sub> ): $\leq 0.020 \%$
	Microbiological criteria:
	Escherichia coli: Absence/g
Algal oil from the microalgae	Description/Definition:
Ulkenia sp.	Oil from the micro-algae <i>Ulkenia</i> sp.
	Acid value: ≤ 0,5 mg KOH/g
	Peroxide value (PV): ≤ 5,0 meq/kg oil
	Moisture and volatiles: $\leq 0.05\%$
	Unsaponifiables: ≤ 4,5 %
	Trans-fatty acids: $\leq 1,0 \%$
	DHA content: ≥ 32 %

	Authorised Novel Food	Specifications
<u>M25</u>		
2	Allanblackia seed oil	Description/Definition:
		Allanblackia seed oil is obtained from the seeds of the allanblackia species: A. floribunda (synonymous with A. parviflora) and A. stuhlmannii.
		Composition of fatty acids (as a % of the total fatty acids):
		Lauric acid — Myristic acid — Palmitic acid (C12:0 - C14:0 - C16:0): sum of these acids < 4,0 %
		Stearic acid (C18:0): 45-58 %
		Oleic acid (C18:1): 40-51 %
		Poly unsaturated fatty acids (PUFA): < 2 %
		Characteristics:
		Free fatty acids: max 0,1 % of total fatty acids
		Trans fatty acids: max 1,0 % of total fatty acids
		Peroxide value: max 1,0 meq/kg
		Unsaponifiable matter: max 1,0 % (w/w) of the oil
		Saponification value: 185-198 mg KOH/g
<u>M9</u>		
2	Aloe macroclada Baker leaf extract	Description/Definition:
		Powdered gel extract derived from the leaves of <i>Aloe macroclada</i> Baker which is substantially equivalent to the same gel derived from <i>Aloe vera</i> (L.) Burr leaves.
		Ash: 25 %
		Dietary fibres: 28,6 %
		Fat: 2,7 %
		Moisture: 4,7 %
		Polysaccharides: 9,5 %
		Protein: 1,63 %
		Glucose: 8,9 %

	Authorised Novel Food	Specifications
23		
	Antarctic Krill oil from Euphausia	Description/Definition:
	superba	To produce lipid extract from Antarctic Krill ( <i>Euphausia superba</i> ) deep-frozen crushed krill or dried krill meal is subjected to lipid extraction with approved extraction solvent (under Directive 2009/32/EC). Proteins and krill material are removed from the lipid extract by filtration. The extraction solvent and residual water are removed by evaporation.
		Saponification value: ≤ 230 mg KOH/g
		Peroxide value (PV): $\leq 3 \text{ meq } O_2/kg \text{ oil}$
		Oxidative stability: All food products containing Antarctic Krill oil from <i>Euphausia superba</i> should demonstrate oxidative stability by appropriate a recognised national/international test methodology (e.g. AOAC).
		Moisture and volatiles: ≤ 3 % or 0,6 expressed as water activity at 25 °C
		Phospholipids: ≥ 35 % to < 60 %
		Trans-fatty acids: ≤ 1 %
		EPA (eicosapentaenoic acid): ≥ 9 %
		DHA (docosahexaenoic acid): ≥ 5 %
<u> 19</u>		
	Antarctic Krill oil rich in phosp- holipids from Euphausia superba	Description/Definition:
	non 2 aprillation on perou	Oil rich in phospholipids is produced from Antarctic krill ( <i>Euphausia superba</i> ) by repeated solvent washings with an approved solvent (under Directive 20 32/EC) to increase phospholipid content of the oil. Solvents are removed from the final product by evaporation.
		Saponification value: ≤ 230 mg KOH/g
		Peroxide value (PV): $\leq 3 \text{ meq } O_2/kg \text{ oil}$
		Moisture and volatiles: ≤ 3 % or 0,6 expressed as water activity at 25 °C
		Phospholipids: ≥ 60 %
		Trans-fatty acids: ≤ 1 %
		EPA (eicosapentaenoic acid): ≥ 9 %
		DHA (docosahexaenoic acid): ≥ 5 %

Authorised Novel Food	Specifications
Arachidonic acid-rich oil from the	Description/Definition:
fungus <i>Mortierella alpina</i>	The clear yellow arachidonic acid-rich oil is obtained by fermentation of the non-genetically modified strains IS-4, I49-N18, FJRK-MA01 and CBS 210.32 o the fungus <i>Mortierella alpina</i> using a suitable liquid. The oil is then extracted from the biomass and purified.
	Arachidonic acid: ≥ 40 % by weight of the total fatty acid content
	Free fatty acids: $\leq 0.45$ % of the total fatty acid content
	Trans fatty acids: $\leq 0.5$ % of the total fatty acid content
	Unsaponifiable matter: ≤ 1,5 %
	Peroxide value (PV): $\leq 5 \text{ meq/kg}$
	Anisidin value: ≤ 20
	Acid value: ≤ 1,0 KOH/g
	Moisture: $\leq 0.5 \%$
Argan oil from <i>Argania spinosa</i>	Description/Definition:
	Argan oil is the oil obtained by cold pressing of the almond like kernels of the fruits of <i>Argania spinosa</i> (L.) Skeels. Kernels may be roasted prior to pressing but with no direct contact with a flame.
	Composition:
	Palmitic acid (C16:0): 12-15 %
	Stearic acid (C18:0): 5-7 %
	Oleic acid (C18:1): 43-50 %
	Linoleic acid (C18:2): 29-36 %
	Unsaponifiable matter: 0,3-2 %
	Total sterols: 100-500 mg/100 g
	Total tocopherols: 16-90 mg/100 g
	Oleic acidity: 0,2-1,5 %
	Peroxide value (PV): < 10 meq O <sub>2</sub> /kg

Authorised Novel Food	Specifications
Astaxanthin-rich oleoresin from Haematococcus pluvialis algae	Description/Definition:
nemicoccus pinamis algae	Astaxanthin is a carotenoid produced by <i>Haematococcus pluvialis</i> algae. Production methods for the growth of the algae are variable; using either close systems exposed to sunlight or strictly controlled illuminated light; alternatively open ponds may be used. The algal cells are harvested and dried; the oleoresi is extracted using either super critical CO <sub>2</sub> or a solvent (ethyl acetate). The Astaxanthin is diluted and standardized to 2,5 %, 5,0 %, 7,0 %, 10 %, 15 % or 20 % using olive oil, safflower oil, Sunflower oil or MCT (Medium Chain Triglycerides).
	Composition of the Oleoresin:
	Fat: 42,2- 99 %
	Protein: 0,3-4,4 %
	Carbohydrate: 0-52,8 %
	Fibre: < 1,0 %
	Ash: 0,0-4,2 %
	Specification of Carotenoids w/w%
	Total Astaxanthins: 2,9-11,1 %
	9-cis-astaxanthin: 0,3-17,3 %
	13-cis-astaxanthin: 0,2-7,0 %
	Astaxanthin monoesters: 79,8-91,5 %
	Astaxanthin diesters: 0,16-19,0 %
	B-Carotene: 0,01-0,3 %
	Lutein: 0-1,8 %
	Canthaxanthin: 0-1,30 %
	Microbiological criteria:
	Total aerobic bacteria: < 3 000 CFU/g
	Yeast and Moulds: < 100 CFU/g
	Coliforms: < 10 CFU/g
	E. coli: Negative
	Salmonella: Negative
	Staphylococcus: Negative

Authorised Novel Food	Specifications
Basil seeds (Ocimum basilicum)	Description/Definition:
	Basil (Ocimum basilicum L.) belongs to the family 'Lamiaceae' within the order 'Lamiales'. Post-harvest the seeds are cleaned mechanically. Flowers, leaves and other parts of the plant are removed. Highest level of purity of Basil seeds has to be ensured by filtering (optical, mechanical). Production process of fruit juice and fruit/vegetable blend beverages containing Basil seeds (Ocimum basilicum L.) includes seed pre-hydration and pasteurisation steps. Microbiological controls and monitoring systems are in place.
	Dry Matter: 94,1 %
	Protein: 20,7 %
	Fat: 24,4 %
	Carbohydrate: 1,7 %
	Dietary Fibre: 40,5 % (Method: AOAC 958,29)
	Ash: 6,78 %
Fermented black bean extract	Description/Definition:
	Fermented black bean extract (Touchi extract) is a fine light-brown protein-rich powder obtained by water extraction of small soybeans ( <i>Glycine max (L.) Merr.</i> ) fermented with <i>Aspergillus oryzae</i> . The extract contains an α-glucosidase inhibitor.
	Characteristics:
	Fat: ≤ 1,0 %
	Protein: ≥ 55 %
	Water: ≤ 7,0 %
	Ash: ≤ 10 %
	Carbohydrate: ≥ 20 %
	α-glucosidase inhibitory activity: IC50 min 0,025 mg/ml
	Soy isoflavone: $\leq 0.3 \text{ g/}100 \text{ g}$

	Authorised Novel Food	Specifications
	Bovine lactoferrin	Description/Definition:
		Bovine lactoferrin is a protein that occurs naturally in cows' milk. It is an iron-binding glycoprotein of approximately 77 kDa and consists of a single polypeptide chain of 689 amino acids.
		Production process: Bovine lactoferrin is isolated from skimmed milk or cheese whey via ion exchange and subsequent ultra-filtration steps. Finally, it is dried by freeze drying or spraying and the large particles are sieved out. It is a virtually odourless, light pinkish powder.
		Physical-Chemical properties of Bovine lactoferrin:
		Moisture: < 4,5 %
		Ash: < 1,5 %
		Arsenic: < 2,0 mg/kg
		Iron: < 350 mg/kg
		Protein: > 93 %
		of which bovine lactoferrin: > 95 %
		of which other proteins: < 5,0 %
		pH (2 % solution, 20 °C): 5,2-7,2
		Solubility (2 % solution, 20 °C): complete
<u>M16</u>		
	Bovine milk basic whey protein	Description
	isolate	Bovine milk basic whey protein isolate is a yellowish grey powder obtained from bovine skimmed milk via a series of isolation and purification steps.
		Characteristics/Composition
		Total protein (w/weight of product): ≥ 90 %
		Lactoferrin (w/weight of product): 25-75 %
		Lactoperoxidase (w/weight of product): 10-40 %
		Other proteins (w/weight of product): ≤ 30 %
		TGF-β2: 12-18 mg/100 g
		Moisture: ≤ 6,0 %

## **▼**<u>M16</u>

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Authorised Novel Food	Specifications
	pH (5 % solution w/v): 5,5 – 7,6
	Lactose: $\leq 3.0 \%$
	Fat: ≤ 4,5 %
	Ash: $\leq 3.5 \%$
	Iron: $\leq 25 \text{ mg/}100 \text{ g}$
	Heavy Metals
	Lead: < 0,1 mg/kg
	Cadmium: < 0,2 mg/kg
	Mercury: < 0,6 mg/kg
	Arsenic: < 0,1 mg/kg
	Microbiological criteria:
	Aerobic mesophilic count: ≤ 10 000 CFU/g
	Enterobacteriaceae: ≤ 10 CFU/g
	Escherichia coli: Negative/g
	Coagulase positive Staphylococci: Negative/g
	Salmonella: Negative/25 g
	Listeria: Negative/25 g
	Cronobacter spp.: Negative/25 g
	Moulds: $\leq 50 \text{ CFU/g}$
	Yeasts: ≤ 50 CFU/g
	CFU: Colony Forming Units
Buglossoides arvensis seed oil	Description/Definition:
	Refined Buglossoides oil is extracted from the seeds of Buglossoides arvensis (L.) I.M.Johnst
	Alpha-linolenic acid: ≥ 35 % w/w of total fatty acids
	Stearidonic acid: ≥ 15 % w/w of total fatty acids
	Linoleic acid: ≥ 8,0 % w/w of total fatty acids
	Trans fatty acids: ≤ 2,0 % w/w of total fatty acids

Authorised Novel Food	Specifications
	Acid value: ≤ 0,6 mg KOH/g
	Peroxide value (PV): $\leq 5.0$ meq $O_2/kg$
	Unsaponifiable content: ≤ 2,0 %
	Protein content (total nitrogen): ≤ 10 μg/ml
	Pyrrolizidine alkaloids: Not detectable with a detection limit of 4,0 µg/kg
Calanus finmarchicus oil	Description/Definition:
	The novel food is ruby coloured, slightly viscous oil with a slight shellfish odour extracted from the crustacean (marine zooplankton) <i>Calanus finmarchicus</i> The ingredient consists primarily of wax esters (> 85 %) with minor amounts of triglycerides and other neutral lipids.
	Specifications:
	Water: < 1,0 %
	Wax esters: > 85 %
	Total fatty acids: > 46 %
	Eicosapentaenoic acid (EPA): > 3,0 %
	Docosahexaenoic acid (DHA): > 4,0 %
	Total fatty alcohols: > 28 %
	C20:1 n-9 fatty alcohol: > 9,0 %
	C22:1 n-11 fatty alcohol: > 12 %
	Trans fatty acids: < 1,0 %
	Astaxanthinesters: < 0,1 %
	Peroxide value (PV): $< 3.0$ meq. $O_2/kg$
Chewing gum base (monome- thoxypolyethylene glycol)	Description/Definition:
thoxypolyethylene glycol)	The novel food ingredient is a synthetic polymer (Patent number WO2006016179). It consists of branched polymers of monomethoxypolyethylene glycol (MPEG) grafted onto polyisoprene-graft-maleic anhydride (PIP-g-MA), and unreacted MPEG (less than 35 % by weight).
	White to off-white colour.
	CAS No.: 1246080-53-4
	Characteristics:
	Moisture: < 5,0 %

Authorised Novel Food	Specifications
	Aluminium: < 3,0 mg/kg
	Lithium: < 0,5 mg/kg
	Nickel: < 0,5 mg/kg
	Residual anhydride: < 15 μmol/g
	Polydispersity index: < 1,4
	Isoprene: < 0,05 mg/kg
	Ethylene oxide: < 0,2 mg/kg
	Free maleic anhydride: < 0,1 %
	Total oligomeres (less than 1 000 Dalton): ≤ 50 mg/kg
	Ethylene glycol: < 200 mg/kg
	Diethylene glycol: < 30 mg/kg
	Monoethylene glycol methyl ether: < 3,0 mg/kg
	Diethylene glycol methyl ether: < 4,0 mg/kg
	Triethylene glycol methyl ether: < 7,0 mg/kg
	1,4-Dioxane: < 2,0 mg/kg
	Formaldehyde: < 10 mg/kg
Chewing gum base (Methyl vinyl	Description/Definition:
ether-maleic anhydride copolymer)	Methyl vinyl ether-maleic anhydride copolymer is an anhydrous copolymer of methyl vinyl ether and maleic anhydride.
	Free-flowing, white to white-off powder
	CAS No: 9011-16-9
	Purity:
	Assay value: At least 99,5 % in dry matter
	Specific viscosity (1 % MEK): 2-10
	Residual methyl vinyl ether: ≤ 150 ppm
	Residual maleic anhydride: ≤ 250 ppm
	Acetaldehyde: ≤ 500 ppm
	Methanol: ≤ 500 ppm
	Dilauroyl peroxide: ≤ 15 ppm
	Total heavy metals: ≤ 10 ppm

Authorised Novel Food	Specifications
	Microbiological criteria:
	Total aerobic plate count: ≤ 500 CFU/g
	Mould/yeast: $\leq 500$ CFU/g
	Escherichia coli: Negative to test
	Salmonella: Negative to test
	Staphylococcus aureus: Negative to test
	Pseudomonas aeruginosa: Negative to test
Chia oil from Salvia hispanica	Description/Definition:
	Chia oil is produced from Chia ( <i>Salvia hispanica</i> L.) seeds (99,9 % pure) by cold pressing. No solvents are used and, once pressed, the oil is held in decantation tanks and a filtration process employed to remove impurities. It can also be produced by extraction with supercritical CO <sub>2</sub> .
	Production process:
	Produced by cold pressing. No solvents are used and, once pressed, the oil is held in decantation tanks and a filtration process employed to remove impurities
	Acidity expressed as oleic acid: ≤ 2,0 %
	Peroxide value (PV): \( \leq 10 \) meq/kg
	Insoluble impurities: ≤ 0,05 %
	Alpha linolenic acid: $\geq 60 \%$
	Linoleic acid: 15-20 %
Chia seeds (Salvia hispanica)	Description/Definition:
	Chia (Salvia hispanica L.) is a summer annual herbaceous plant belonging to the Labiatae family. Post-harvest the seeds are cleaned mechanically. Flowers leaves and other parts of the plant are removed.
	Dry matter: 90-97 %
	Protein: 15-26 %
	Fat: 18-39 %
	Carbohydrate (*): 18-43 %
	Crude Fibre(**): 18-43 %
	Ash: 3-7 %
	(*) Carbohydrates include the fibre value

	Production process:
	Production process of fruit juices and fruit juice blends beverages, containing Chia seeds, includes seed pre-hydration and pasteurisation steps. Microbiological controls and monitoring systems are in place.
Chitin-glucan from Aspergillus	Description/Definition:
niger	Chitin-glucan is obtained from the mycelium of <i>Aspergillus niger</i> ; it is a slightly yellow, odourless, free-flowing powder. It has a dry matter content of 90 % or more.
	Chitin-glucan is composed largely of two polysaccharides:
	— chitin, composed of repeating units of N-acetyl-D-glucosamine (CAS No: 1398-61-4),
	— beta (1, 3)-glucan, composed of repeating units of D-glucose (CAS No: 9041-22-9).
	Loss on drying: ≤ 10 %
	Chitin-glucan: ≥ 90 %
	Ratio of chitin to glucan: 30:70 to 60:40
	Ash: $\leq 3.0 \%$
	Lipids: ≤ 1,0 %
	Proteins: $\leq 6.0 \%$
Chitin-glucan complex from Fomes	Description/Definition:
fomentarius	Chitin-glucan complex is obtained from the cell walls of the fruit bodies of the fungus <i>Fomes fomentarius</i> . It consists primarily of two polysaccharides:
	— Chitin, composed of repeating units of N-acetyl-D-glucosamine (CAS No: 1398-61-4);
	— Beta-(1,3)(1,6)-D-glucan, composed of repeating units of D-glucose (CAS No: 9041-22-9).
	The production process consists of several steps, including: cleaning, reduction in size and grinding, softening in water and heating in an alkaline solution, washing, drying. No hydrolysis is applied during the production process.
	Appearance: Powder, odourless, flavourless, brown
	Purity:
	Moisture: ≤ 15 %
	Ash: $\leq 3.0 \%$
	Chitin-glucan: ≥ 90 %
	Ratio of chitin to glucan: 70:20
	Total carbohydrates, excluding glucans: ≤ 0,1 %

Specifications

Authorised Novel Food	Specifications
	Proteins: $\leq 2.0 \%$
	Lipids: ≤ 1,0 %
	Melanins: ≤ 8,3 %
	Additives: None
	pH: 6,7-7,5
	Heavy metals:
	Lead (ppm): $\leq 1,00$
	Cadmium (ppm): $\leq 1,00$
	Mercury (ppm): $\leq 0.03$
	Arsenic (ppm): $\leq 0.20$
	Microbiological criteria:
	Total mesophilic bacteria: $\leq 10^3/g$
	Yeast and moulds: $\leq 10^3/g$
	Coliforms at 30 °C: $\leq 10^3/g$
	$E. \ coli: \leq 10/g$
	Salmonella and other pathogenic bacteria: Absence/25 g
Chitosan extract from fungi	Description/Definition:
(Agaricus bisporus; Aspergillus	The chitosan extract (containing mainly poly(D-glucosamine)) is obtained from stems of Agaricus bisporus or from the mycelium of Aspergillus niger.
niger)	The patented production process consists of several steps, including: extraction and deacetylation (hydrolysis) in alkaline medium, solubilisation in acidic medium, precipitation in alkaline medium, washing and drying.
	Synonym: Poly(D-glucosamine)
	Chitosan CAS number: 9012-76-4
	Chitosan formula: (C <sub>6</sub> H <sub>11</sub> NO <sub>4</sub> ) <sub>n</sub>
	Appearance: fine free-flowing powder
	Aspect: Off –white to slightly brownish
	Odour: Odourless
	Purity:
	Chitosan content (% w/w dry weight):≥ 85
	Glucan content (% w/w dry weight): ≤ 15
	Loss on drying (% w/w dry weight): $\leq 10$
	Viscosity (1 % in 1 % acetic acid): 1-15

Authorised Novel Food	Specifications
Authorised Novel Food	Degree of acetylation (in % mol/wet weight): 0-30  Viscosity (1 % in 1 % acetic acid) (mPa.s): 1-14 for chitosan from Aspergillus niger; 12-25 for chitin from <i>Agaricus bisporus</i> Ash (% w/w dry weight): ≤ 3,0  Proteins (% w/w dry weight): ≤ 2,0  Particle size: > 100 nm  Tapped density (g/cm³): 0,7-1,0  Fat binding capacity 800 × (w/w wet weight): pass  Heavy metals:  Mercury (ppm): ≤ 0,1  Lead (ppm): ≤ 1,0  Arsenic (ppm): ≤ 1,0  Cadmium (ppm): ≤ 0,5  Microbiological criteria:
	Aerobic count (CFU/g): ≤ 10 <sup>3</sup> Yeast and mould count (CFU/g): ≤ 10 <sup>3</sup> Escherichia coli (CFU/g): ≤ 10  Enterobacteriaceae (CFU/g): ≤ 10  Salmonella: Absence/25g  Listeria monocytogenes: Absence/25g
Chondroitin sulphate	Description/Definition:  Chondroitin sulphate (sodium salt) is a biosynthetic product. It is obtained by chemical sulphation of chondroitin derived from fermentation by the bacterium <i>Escherichia coli</i> O5:K4:H4 strain U1-41 (ATCC 23502).  Chondroitin sulphate (sodium salt) (% dry basis): 95-105  MWw (weight avg.) (kDa): 5-12  MWn (number avg.) (kDa): 4-11  Dispersity (wh/w0,05): ≤ 0,7  Sulphation pattern (ΔDi-6S) (%): ≤ 85  Loss on drying (%) (105 °C to constant weight): ≤ 10,0  Residue on ignition (% dry basis): 20-30  Protein (% dry basis): ≤ 0,5  Endotoxins (EU/mg): ≤ 100  Total organic impurities (mg/kg): ≤ 50

Authorised Novel Food	Specifications
Chromium Picolinate	Description/Definition:
	Chromium picolinate is a reddish free-flowing powder, slightly soluble in water at pH 7. The salt is also soluble in polar organic solvents.
	Chemical name: tris(2pyridinecarboxylato-N,O)chromium(III) or 2-pyridinecarboxylic acid chromium(III) salt
	CAS No.: 14639-25-9Chemical formula: $Cr(C_6H_4NO_2)_3$
	Chemical characteristics:
	Chromium Picolinate: ≥ 95 %
	Chromium (III): 12-13 %
	Chromium (VI): not detected
	Water: ≤ 4,0 %
istus incanus L. Pandalis herb	Description:
isius incurus E. Tandans nerb	Cistus incanus L. Pandalis herb; species belonging to the Cistaceae family and native to the Mediterranean region, Chalkidiki Peninsula.
	Composition:
	Moisture: 9–10 g/100 g herbs
	Protein: 6,1 g/100 g herbs
	Fat: 1,6 g/100 g herbs
	Carbohydrates: 50,1 g/100 g herbs
	Fiber: 27,1 g/100 g herbs
	Minerals: 4,4 g/100 g herbs
	Sodium: 0,18 g
	Potassium: 0,75 g
	Magnesium: 0,24 g
	Calcium: 1,0 g
	Iron: 65 mg
	Vitamin B <sub>1</sub> : 3,0 μg
	Vitamin B <sub>2</sub> : 30 μg
	Vitamin B <sub>6</sub> : 54 μg
	Vitamin C: 28 mg
	Vitamin A: less than 0,1 mg
	Vitamin E: 40–50 mg

Authorised Novel Food	Specifications
	Alpha-Tocopherol: 20–50 mg
	Beta and Gamma-Tocopherols: 2–15 mg
	Delta-Tocopherol: 0,1–2 mg
Citicoline	Description/Definition:
Citiconne	Citicoline is produced by a microbial process.
	Citicoline is composed of cytosine, ribose, pyrophosphate and choline.
	White crystalline powder
	Chemical name: Choline cytidine 5'-pyrophosphate, Cytidine 5'-(trihydrogen diphosphate) P'-[2-(trimethylammonio)ethyl]ester inner salt
	Chemical formula: $C_{14}H_{26}N_4O_{11}P_2$
	Molecular weight: 488,32 g/mol
	CAS No.: 987-78-0
	pH (sample solution of 1 %): 2,5-3,5
	Purity:
	Assay value: ≥ 98 % of dry matter
	Loss on drying (100 °C for 4 hours): $\leq 5.0$ %
	Ammonium: ≤ 0,05 %
	Arsenic: Not more than 2 ppm
	Free phosphoric acids: $\leq 0.1 \%$
	5'-Cytidylic acid: ≤ 1,0 %
	Microbiological criteria:
	Total plate count: $\leq 10^3$ CFU/g
	Yeast and moulds: $\leq 10^2 \text{ CFU/g}$
	Escherichia coli: Absence in 1 g
Clostridium butyricum	Description/Definition:
Ciosiratum outyricum	Clostridium butyricum (CBM-588) is a Gram-positive, spore-forming, obligate anaerobic, non-pathogenic, non-genetically modified bacterium. Depositor number FERM BP-2789

Authorised Novel Food	Specifications
	Microbiological criteria:
	Total viable aerobic count: $\leq 10^3$ CFU/g
	Escherichia coli: Not detected in 1 gStaphylococcus aureus: Not detected in 1 g
	Pseudomonas aeruginosa: Not detected in 1 g
	Yeast and moulds: $\leq 10^2 \text{ CFU/g}$
Extract of defatted cocoa powder	Cocoa (Theobroma cacao L.) Extract
-	Appearance: Dark brown powder free of visible impurities
	Physical and chemical properties:
	Polyphenol content: Min 55,0 % GAE
	Theobromine content: Max 10,0 %
	Ash content: Max 5,0 %
	Moisture content: Max 8,0 %
	Bulk density: 0,40-0,55 g/cm <sup>3</sup>
	pH: 5,0-6,5
	Residual solvent: Max 500 ppm
Low fat cocoa extract	Low fat Cocoa (Theobroma cacao L.) extract
Low me cocon carrier	Appearance: Dark red to purple powder
	Cocoa extract, concentrate: Min 99 %
	Silicon dioxide (technological aid): Max 1,0 %
	Cocoa flavanols: Min. 300 mg/g
	— Epicatechin: Min. 45 mg/g
	Loss on drying: Max. 5,0 %
Coriander seed oil from Coriandrum sativum	Description/Definition:
инигит эшичит	Coriander seed oil is an oil containing glycerides of fatty acids that is produced from the seeds of the coriander plant Coriandrum sativum L.
	Slight yellow colour, bland taste

## **▼**<u>M9</u>

	Authorised Novel Food	Specifications
		CAS No.: 8008-52-4
		Composition of fatty acids:
		Palmitic acid (C16:0): 2-5 %
		Stearic acid (C18:0): < 1,5 %
		Petroselinic acid (cis-C18:1(n-12)): 60-75 %
		Oleic acid (cis-C18:1 (n-9)): 8-15 %Linoleic acid (C18:2): 12-19 %
		α-Linolenic acid (C18:3): < 1,0 %
		Trans fatty acids: ≤ 1,0 %
		Purity:
		Refractive index (20 °C): 1,466-1,474
		Acid value: ≤ 2,5 mg KOH/g
		Peroxide value (PV): $\leq 5.0 \text{ meq/kg}$
		Iodine value: 88-110 units
		Saponification value: 186-200 mg KOH/g
		Unsaponifiable matter: ≤ 15 g/kg
▼ <u>M15</u>		
	Cranberry extract powder	Description/Definition:
	· · · ·	Cranberry extract powder is a water-soluble phenolic-rich powder extract prepared through an ethanolic extraction from the juice concentrate of sound, mature berries of the cranberry cultivar <i>Vaccinium macrocarpon</i> .
		Characteristics/Composition
		Moisture (% $w/w$ ): $\leq 4$
		Proanthocyanidins — PACs (% w/w dry weight)
		— OSC-DMAC method (3) (5): 55.0-60.0 or
		— BL-DMAC method (4) (5): 15.0-18.0
		Total phenolics (GAE (6), % w/w dry weight) (5)
		— Folin-Ciocalteau method: > 46.2
		Solubility (water): 100 %, with no visible insoluble particles

## **▼**<u>M15</u>

**▼**<u>M9</u>

Authorised Novel Food	Specifications
	Ethanol Content (mg/kg): ≤ 100
	Screen Analysis: 100 % through 30 mesh screen
	Appearance and aroma, as powder: Free-flowing, deep red colour. Earthy aroma with no burnt character.
	Heavy metals:
	Arsenic (ppm): < 3
	Microbiological criteria:
	Yeast: < 100 CFU (7)/g
	Mould: < 100 CFU/g
	Aerobic plate count: < 1 000 CFU/g
	Coliforms: < 10 CFU/g
	Escherichia coli: < 10 CFU/g
	Salmonella: Absent in 375 g
Crataegus pinnatifida dried fruit	Description/Definition:
	Dried fruits of Crataegus pinnatifida species belonging to the Rosaceae family and native to north China and Korea.
	Composition:
	Dry matter: 80 %
	Carbohydrates: 55 g/kg fresh weight
	Fructose: 26,5–29,3 g/100 g
	Glucose: 25,5–28,1 g/100 g
	Vitamin C: 29,1 mg/100 g fresh weight
	Sodium: 2,9 g/100 g fresh weight
	Compotes are products obtained by thermal processing of the edible part of one or several species of fruits, whole or in pieces, sieved or not, without significant concentration. Sugars, water, cider, spices and lemon juice may be used.
α-cyclodextrin	Description/Definition:
	A non-reducing cyclic saccharide consisting of six $\alpha$ -1,4-linked D-glucopyranosyl units produced by the action of cyclodextrin glucosyltransferase (CGTase, EC 2.4.1.19) on hydrolyzed starch. Recovery and purification of $\alpha$ -cyclodextrin may be carried out using one of the following procedures: precipitation of a complex of $\alpha$ -cyclodextrin with 1-decanol, dissolution in water at elevated temperature and re-precipitation, steam-stripping of the

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complexant, and crystallisation of  $\alpha$ -cyclodextrin from the solution; or chromatography with ion-exchange or gel filtration followed by crystallisation of  $\alpha$ -cyclodextrin from the purified mother liquor; or membrane separation methods such as ultra-filtration and reverse osmosis: Description: Virtually odourless, white or almost white crystalline solid.

Synonyms:  $\alpha$ -cyclodextrin,  $\alpha$ -dextrin, cyclohexaamylose, cyclomaltohexaose,  $\alpha$ -cycloamylase

Chemical name: Cyclohexaamylose

Specifications

CAS No.: 10016-20-3

Chemical formula: (C<sub>6</sub>H<sub>10</sub>O<sub>5</sub>)<sub>6</sub>

Formula weight: 972,85 Assay: ≥ 98 % (dry basis)

**Identification:** 

Melting range: Decomposes above 278 °C

Solubility: Freely soluble in water; very slightly soluble in ethanol Specific rotation:  $[\alpha]_D^{25}$ : Between +145° and +151° (1 % solution)

Chromatography: The retention time for the major peak in a liquid chromatogram of the sample corresponds to that for  $\alpha$ -cyclodextrin in a chromatogram of reference  $\alpha$ -cyclodextrin (available from *Consortium für Elektrochemische Industrie GmbH, München, Germany or Wacker Biochem Group, Adrian, MI, USA*) using the conditions described in the METHOD OF ASSAY

**Purity:** 

Water: ≤ 11 % (Karl Fischer Method)

Residual complexant: ≤ 20 mg/kg

(1-decanol)

Reducing substances:  $\leq 0.5 \%$  (as glucose)

Sulphated ash:  $\leq 0.1 \%$ 

 $Lead: \leq 0.5 \ mg/kg$ 

Method of assay:

Determine by liquid chromatography using the following conditions:

Sample solution: Weigh accurately about 100 mg of test sample into a 10 ml volumetric flask and add 8 ml of deionised water. Dissolve the sample completely using an ultra-sonification bath (10-15 min) and dilute to the mark with purified deionised water. Filter through a 0,45-micrometer filter

Authorised Novel Food	Specifications
	Reference solution: Weigh accurately about 100 mg of α-cyclodextrin into a 10 ml volumetric flask and add 8 ml of deionised water. Dissolve the sample completely using an ultra-sonification bath and dilute to the mark with purified deionised water.
	Chromatography: Liquid chromatograph equipped with a refractive index detector and an integrating recorder.
	Column and packing: Nucleosil-100-NH <sub>2</sub> (10 μm) (Macherey & Nagel Co. Düren, Germany) or similar
	Length: 250 mm
	Diameter: 4 mm
	Temperature: 40 °C
	Mobile phase: acetonitrile/water (67/33, v/v)
	Flow rate: 2,0 ml/min
	Injection volume: 10 $\mu$ lProcedure: Inject the sample solution into the chromatograph, record the chromatogram, and measure the area of the $\alpha$ -CD peak. Calculate the percentage of $\alpha$ -cyclodextrin in the test sample as follows:
	% α-cyclodextrin (dry basis) = 100 × (A <sub>S</sub> /A <sub>R</sub> ) (W <sub>R</sub> /W <sub>S</sub> )
	where
	$A_S$ and $A_R$ are the areas of the peaks due to $\alpha$ -cyclodextrin for the sample solution and reference solution, respectively.
	$W_S$ and $W_R$ are the weights (mg) of the test sample and reference $\alpha$ -cyclodextrin, respectively, after correcting for water content.
γ-cyclodextrin	Description/Definition:
	A non-reducing cyclic saccharide consisting of eight $\alpha$ -1,4-linked D-glucopyranosyl units produced by the action of cyclodextrin glucosyltransferase (CGTase, EC 2.4.1.19) on hydrolysed starch. Recovery and purification of $\gamma$ -cyclodextrin may be carried out by precipitation of a complex of $\gamma$ -cyclodextrin with 8-cyclohexadecen-1-one, dissolution of the complex with water and n-decane, steam-stripping of the aqueous phase and recovery of gamma-CD from the solution by crystallisation.
	Virtually odourless, white or almost white crystalline solid
	Synonyms: γ-cyclodextrin, γ-dextrin, cyclooctaamylose, cyclomaltooctaose, γ-cycloamylase
	Chemical name: Cyclooctaamylose
	CAS number: 17465-86-0
	Chemical formula: (C <sub>6</sub> H <sub>10</sub> O <sub>5</sub> ) <sub>8</sub>
	Assay: ≥ 98 % (dry basis)

	Authorised Novel Food	Specifications
		Identification:  Melting range: Decomposes above 285 °C  Solubility: Freely soluble in water; very slightly soluble in ethanol  Specific rotation: [α] <sub>D</sub> <sup>25</sup> : between + 174° and + 180° (1 % solution)  Purity:  Water: ≤ 11 %  Residual complexant (8-cyclohexadecen-1-one (CHDC)): ≤ 4 mg/kg  Residual solvent (n-decane): ≤ 6mg/kg  Reducing substances: ≤ 0,5 % (as glucose)
<b>W</b> 1/21		Sulphated ash: ≤ 0,1 %
<b>▼</b> <u>M21</u>		
	Decorticated grains of Digitaria exilis (Kippist) Stapf (fonio)	Description/Definition The traditional food is the decorticated grain (bran removed) of Digitaria exilis (Kippist) Stapf.
	(Traditional food from a third country)	Digitaria exilis (Kippist) Stapf) is an annual herbaceous plant belonging to the Poaceae family.  Typical nutritional components of decorticated grain of fonio
		Carbohydrates: 76,1 g/100 g of fonio
		Water: 12,4 g/100 g of fonio Protein: 6,9 g/100 g of fonio
		Fat: 1,2 g/100 g of fonio
		Fibre: 2,2 g/100 g of fonio
		Ash: 1,2 g/100 g of fonio
		Phytate content: $\leq 2.1 \text{ mg/g}$
<b>▼</b> <u>M9</u>		
	Dextran preparation produced by Leuconostoc mesenteroides	1. Powdered form: Carbohydrates: 60 % with: (Dextran: 50 %, Mannitol: 0,5 %, Fructose: 0,3 %, Leucrose: 9,2 %) Protein: 6,5 %

Authorised Novel Food	Specifications		
	Lipid: 0,5 %		
	Lactic acid: 10 %		
	Ethanol: traces		
	Ash: 13 %		
	Moisture: 10 %		
	2. Liquid form:		
	Carbohydrates: 12 % with: (Dextran: 6,9 %, Mannitol: 1,1 %, Fructose: 1,9 %, Leucrose: 2,2 %)		
	Protein: 2,0 %		
	Lipid: 0,1 %		
	Lactic acid: 2,0 % Ethanol: 0,5 %		
	Ash: 3,4 %		
	Moisture: 80 %		
Diacylglycerol oil of plant origin	Description/Definition:		
	Manufactured from glycerol and fatty acids derived from edible vegetable oils, in particular from soybean oil (Glycine max) or rapeseed oil (Brassica campestris, Brassica napus) using a specific enzyme.		
	Acylglycerol Distribution:		
	Diacylglycerols (DAG): ≥ 80 %		
	1,3-Diacylglycerols (1,3-DAG): ≥ 50 %		
	Triacylglycerols (TAG): ≤ 20 %		
	Monoacylglycerols (MAG): ≤ 5,0 %		
	Fatty Acid Composition (MAG, DAG, TAG):		
	Oleic acid (C18:1): 20-65 %		
	Linoleic acid (C18:2): 15-65 %		
	Linolenic acid (C18:3): ≤ 15 %		
	Saturated fatty acids: ≤ 10 %		

Authorised Novel Food	Specifications	
	Others:	
	Acid value: ≤ 0,5 mg KOH/g	
	Moisture and volatile: ≤ 0,1 %  Peroxide value (PV): ≤ 1,0 meq/kg	
	Unsaponifiables: ≤ 2,0 %	
	Trans fatty acids≤ 1,0 %  MAG = monoacylglycerols, DAG = diacylglycerols, TAG = triacylglycerols	
Dihydrocapsiate (DHC)	Description/Definition:	
,	Dihydrocapsiate is synthesised by enzyme-catalysed esterification of vanillyl alcohol and 8-methylnonanoic acid. Following the esterification dihydrocapsia is extracted with n-hexane.	
	Viscous to colourless to yellow liquid	
	Chemical formula: C <sub>18</sub> H <sub>28</sub> O <sub>4</sub>	
	CAS No: 205687-03-2	
	Physical-chemical properties:	
	Dihydrocapsiate: > 94 %	
	8-Methylnonanoic acid: < 6,0 %	
	Vanillyl acohol: < 1,0 %	
	Other synthesis related substances: < 2,0 %	
3		
Dried aerial parts of <i>Hoodia</i>	Description/Definition:	
parviflora	It is the whole dried aerial parts of <i>Hoodia parviflora</i> N.E.Br., (family <i>Apocynaceae</i> )	
	Characteristics/Composition	
	Plant material: Aerial parts of at least 3-year-old plants	
	Appearance: Light green to tan fine powder	
	Solubility (water): > 25 mg/mL	
	Moisture: < 5,5 %	
	$A_{w}$ : < 0,3	

Authorised Novel Food	Specifications
	pH: < 5,0
	Protein: < 4,5 g/100 g
	Fat: < 3 g/100 g
	Carbohydrate (including dietary fibre): < 80 g/100 g
	Dietary fibre: < 55 g/100 g
	Total sugars: < 10,5 g/100 g
	Ash: < 20 %
	Hoodigosides
	P57: 5–50 mg/kg
	L: 1 000–6 000 mg/kg
	O: 500–5 000 mg/kg
	Total: 1 500–11 000 mg/kg
	Heavy metals:
	Arsenic: < 1,00 mg/kg
	Mercury: < 0,1 mg/kg
	Cadmium: < 0,1 mg/kg
	Lead: < 0,5 mg/kg
	Microbiological criteria:
	Aerobic plate count: < 10 <sup>5</sup> CFU/g
	Escherichia coli: < 10 CFU/g
	Staphylococcus aureus: < 50 CFU/g
	Total coliforms: < 10 CFU/g
	Yeast: ≤ 100 CFU/g
	Mould: $\leq 100 \text{ CFU/g}$
	Salmonella species: Negative/25 g
	Listeria monocytogenes: Negative/25 g
	CFU: Colony Forming Units
	C. C. Colony 1 change of the

Authorised Novel Food	Specifications
Dried extract of <i>Lippia citriodora</i> from cell cultures	Description/Definition:  Dried extract of Lippia citriodora (Palau) Kunth from cell cultures HTN®Vb.
Echinacea angustifolia extract from cell cultures	Description/Definition:  Extract of the roots of Echinacea angustifolia obtained from plant tissue culture which is substantially equivalent to a root extract from Echinacea angustifolia obtained in ethanol-water titrated to 4 % echinacoside.
Echinacea purpurea extract from cell cultures	Description/Definition:  Dried extract of Echinacea purpurea from cell cultures HTN®Vb
Echium plantagineum oil	Description/Definition:  Echium oil is the pale yellow product obtained by refining oil extracted from the seeds of <i>Echium plantagineum</i> L. Stearidonic acid: $\geq 10$ % w/w of total fatty acids  Trans fatty acids: $\leq 2.0$ % (w/w of total fatty acids)  Acid value: $\leq 0.6$ mg KOH/g  Peroxide value (PV): $\leq 5.0$ meq O <sub>2</sub> /kg  Unsaponifiable content: $\leq 2.0$ %  Protein content (total nitrogen): $\leq 20$ μg/ml  Pyrrolizidine alkaloids: Not detectable with a detection limit 4,0 μg/kg

▼ <u>M9</u>			
	Authorised Novel Food	Specifications	
<b>▼</b> <u>M18</u>			
	Egg membrane hydrolysate	Description	
		, ,	es of chicken eggs. The eggshells undergo hydro-mechanical separation in order to patented solubilisation method. Following the solubilisation process, the solution is
		Characteristics/Composition	
		Chemical parameters	Methods
		Total nitrogen-containing compounds (% w/w): ≥ 88	Combustion according to AOAC 990.03 and AOAC 992.15
		Collagen (% w/w): ≥ 15	Sircol <sup>TM</sup> Soluble Collagen Assay
		Elastin (% w/w): $\geq 20$	Fastin <sup>TM</sup> Elastin Assay

Calcium: ≤ 1 % Physical parameters

Total glycosaminoglycans (% w/w):

pH: 6,5 - 7,6

≥ 5

Ash (% w/w):  $\leq 8$ 

Moisture (% w/w):  $\leq 9$ 

Water activity:  $\leq 0.3$ 

Solubility (in water): soluble

Bulk density: ≥ 0,6 g/cc

Heavy metals

Arsenic  $\leq 0.5$  mg/kg

Microbiological criteria

Aerobic plate count: ≤ 2 500 CFU/g

Escherichia coli: ≤ 5 MPN/g

Salmonella: Negative (in 25 g)

Coliforms: ≤ 10 MPN/g

Staphylococcus aureus: ≤ 10 CFU/g Mesophilic spore count: ≤ 25 CFU/g Thermophilic spore count: ≤ 10 CFU/10 g USP26 (chondroitin sulphate K0032 method)

## **▼**<u>M18</u>

Authorised No	ovel Food		Specifica	tions
		Yeast: ≤ 10 CFU/g		
		Mould: ≤ 200 CFU/g		
		CFU: Colony Forming Units;	; MPN = Most Probable Number; USP: United State	es Pharmacopeia.
Epigallocatechin gal		Description/Definition:		
purified extract from leaves (Camellia since			n the leaves of green tea (Camellia sinensis (L.) Kur catechin gallate (EGCG), and has a melting point b	ntze) in the form of a fine, off-white to pale pink powder. It is composed of the etween approx. 210 and 215 °C
		Appearance: off-white to pal	e pink powder	
		Chemical name: polyphenol (-) epigallocatechin-3-gallate		
		Synonyms: epigallocatechin gallate (EGCG)		
		CAS No.: 989-51-5		
		INCI name: epigallocatechin gallate		
		Molecular mass: 458,4 g/mol		
		Loss on drying: max 5,0 %		
		Heavy metals:		
		Arsenic: max 3,0 ppm		
		Lead: max 5,0 ppm		
		Assay:		
		Min. 94 % EGCG (on dry n	naterial)	
		max. 0,1 % caffeine		
		Solubility: EGCG is fairly so	oluble in water, ethanol, methanol and acetone	
L-ergothioneine		Definition		
		Chemical name (IUPAC): (2S)-3-(2-thioxo-2,3-dihydro-1 <i>H</i> -imidazol-4-yl)-2-(trimethylammonio)-Propanoate		
	Chemical formula: C <sub>9</sub> H <sub>15</sub> N <sub>3</sub> O	$O_2S$		
		Molecular mass: 229,3 Da		
		CAS No.: 497-30-3		
		Parameter	Specification	Method
		Appearance	White powder	Visual
		Optical rotation	$[\alpha]_D \ge (+) \ 122^{\circ} \ (c = 1, H_2O)^{a)}$	

Authorised Novel Food	Specifications		
	Chemical purity	≥ 99,5 %	HPLC [Eur. Ph. 2,2.29]
		≥ 99,0 %	1H-NMR
	Identification	Compliant with the structure	1H-NMR
		C: $47,14 \pm 0,4 \%$	Elemental analysis
		H: $6,59 \pm 0,4 \%$	
		N: $18,32 \pm 0,4 \%$	
	Total residual solvents	[Eur. Ph. 01/2008:50400]	Gas chromatography
	(methanol, ethyl acetate, isopro- panol, ethanol)	< 1 000 ppm	[Eur. Ph. 01/2008:20424]
	Loss on drying	Internal standard < 0,5 %	[Eur. Ph. 01/2008:20232]
	Impurities	< 0,8 %	HPLC/GPC or 1H-NMR
	Heavy metals <sup>b) c)</sup>		
	Lead	< 3,0 ppm	ICP/AES
	Cadmium	< 1,0 ppm	(Pb, Cd)
	Mercury	< 0,1 ppm	Atomic fluorescence (Hg)
	Microbiological specifications <sup>b)</sup>		
	Total viable aerobic count (TVAC)	$\leq 1 \times 10^3 \text{ CFU/g}$	[Eur. Ph. 01/2011:50104]
	Total yeast and mould count (TYMC)	$\leq 1 \times 10^2 \text{ CFU/g}$	
	Escherichia coli	Absence in 1 g	

Authorised Novel Food	Specifications		
	Eur. Ph.: European Pharmacopoeia; 1H-NMR: proton nuclear magnetic resonance; HPLC: high-performance liquid chromatography; GPC: gel permeation chromatography; ICP/AES: Inductively coupled plasma atomic emission spectroscopy;		
	CFU: colony-forming units.		
	a) Lit. $[\alpha]_D = (+) 126,6^{\circ} (c = 1, H_2O)$		
	b) Analyses conducted on each batch		
	c) Maximum levels in accordance with Regulation (EC) No 1881/2006		
Ferric Sodium EDTA	Description/Definition:		
	Ferric Sodium EDTA (ethylenediaminetetraacetic acid) is an odourless free-flowing, yellow to brown powder with a chemical purity of more than 99 % (w/w). It is freely soluble in water.		
	Chemical formula: C <sub>10</sub> H <sub>12</sub> FeN <sub>2</sub> NaO <sub>8</sub> * 3H <sub>2</sub> O		
	Chemical characteristics:		
	pH of 1 % solution: 3,5-5,5		
	Iron: 12,5-13,5 %		
	Sodium: 5,5 %		
	Water: 12,8 %		
	Organic matter (CHNO): 68,4 %		
	EDTA: 65,5-70,5 %		
	Water insoluble matter: $\leq 0.1 \%$		
	Nitrilo-triacetic acid: ≤ 0,1 %		
Ferrous ammonium phosphate	Description/Definition:		
• •	Ferrous ammonium phosphate is a grey/green fine powder, practically insoluble in water and soluble in dilute mineral acids.		
	CAS No.: 10101-60-7		
	Chemical formula: FeNH <sub>4</sub> PO <sub>4</sub>		
	Chemical characteristics:		
	pH of 5 % suspension in water: 6,8-7,8		
	Iron (total): ≥ 28 %		

	Iron (II): 22-30 % (w/w)
	Iron (III): $\leq 7.0 \%$ (w/w)
	Ammonia: 5-9 % (w/w)
	Water: ≤ 3,0 %
Fish peptides from Sardinops	Description/Definition:
sagax	The novel food ingredient is a peptide mixture, which is obtained by an alkaline protease-catalysed hydrolysis of fish ( <i>Sardinops sagax</i> ) muscle, subsequent isolation of the peptide fraction by column chromatography, concentration under vacuum and spray drying.
	Yellowish white powderPeptides (¹) (short chain peptides, dipeptides and tripeptides with a molecular weight of less than 2 kDa): ≥ 85 g/100 g
	Val-Tyr (dipeptide): 0,1-0,16 g/100 g
	Ash: $\leq 10 \text{ g}/100 \text{ g}$
	Moisture: $\leq 8 \text{ g/}100 \text{ g}$
	(¹) Kjeldahl method
Flavonoids from Glycyrrhiza glabra	Description/Definition:
	Flavonoids derived from the roots or rootstock of <i>Glycyrrhiza glabra</i> L. are extracted with ethanol followed by further extraction of this ethanolic extract with medium-chain triglycerides. It is a dark-brown coloured liquid, containing 2,5 % to 3,5 % of glabridin.
	Moisture: < 0,5 %
	Ash: < 0,1 %
	Peroxide value (PV): < 0,5 meq/kg
	Glabridin: 2,5-3,5 % of fat
	Glycyrrhizinic acid: < 0,005 %
	Fat including polyphenol-type substances: ≥ 99 %
	Protein: < 0,1 %
	Carbohydrates: not detectable
Fucoidan extract from the seaweed	Description/Definition:
Fucus vesiculosus	Fucoidan from the seaweed <i>Fucus vesiculosus</i> is extracted using aqueous extraction in acidic solution and filtration processes without the use of organic solvents. The resulting extract is concentrated and dried to yield the fucoidan extract with the following specifications:

Specifications

Authorised Novel Food	Specifications	
	Off-white to brown powder	
	Odour and Taste: Bland odour and taste	
	Moisture: < 10 % (105 °C for 2 hours)	
	pH value: 4,0-7,0 (1 % suspension at 25 °C)	
	Heavy metals:	
	Arsenic (inorganic): < 1,0 ppm	
	Cadmium: < 3,0 ppm	
	Lead: < 2,0 ppm	
	Mercury: < 1,0 ppm	
	Microbiological criteria:	
	Total aerobic microbial count: < 10 000 CFU/g	
	Yeast and mould count: < 100 CFU/g	
	Total enterobacteria count: Absence/g	
	Escherichia coli: Absence/g	
	Salmonella: Absence/10 g	
	Staphylococcus aureus: Absence/g	
	Composition of the two permitted types of extracts, based on the level of fucoidan:	
	Extract 1:	
	Fucoidan: 75-95 %	
	Alginate: 2,0-5,5 %	
	Polyphloroglucinol: 0,5-15 %	
	Mannitol: 1-5 %	
	Natural salts/Free Minerals: 0,5-2,5 %	
	Other carbohydrates: 0,5-1,0 %	
	Protein: 2,0-2,5 %	
	Extract 2:	
	Fucoidan: 60-65 %	

Authorised Novel Food	Specifications
	Alginate: 3,0-6,0 %
	Polyphloroglucinol: 20-30 %
	Mannitol: < 1,0 %
	Natural salts/Free Minerals: 0,5-2,0 %
	Other carbohydrates: 0,5-2,0 %
	Protein: 2,0-2,5 %
Fucoidan extract from the seaweed	Description/Definition:
Undaria pinnatifida	Fucoidan from seaweed <i>Undaria pinnatifida</i> is extracted using aqueous extraction in acidic solution and filtration processes without the use of organic solvents. The resulting extract is concentrated and dried to yield the fucoidan extract with the following specifications:
	Off-white to brown powder
	Odour and Taste: Bland odour and tasteMoisture: < 10 % (105 °C for 2 hours)
	pH value: 4,0-7,0 (1 % suspension at 25 °C)
	Heavy metals:
	Arsenic (inorganic): < 1,0 ppm
	Cadmium: < 3,0 ppm
	Lead: < 2,0 ppm
	Mercury: < 1,0 ppm
	Microbiology:
	Total aerobic microbial count: < 10 000 CFU/g
	Yeast and mould count: < 100 CFU/g
	Total enterobacteria count: Absence/g
	Escherichia coli: Absence/g
	Salmonella: Absence/10 g
	Staphylococcus aureus: Absence/g
	Composition of the two permitted types of extracts, based on the level of fucoidan:
	Extract 1:
	Fucoidan: 75-95 %
	Alginate: 2,0-6,5 %

Authorised Novel Food	Specifications		
	Polyphloroglucinol: 0,5-3,0 %		
	Mannitol: 1-10 %		
	Natural salts/Free Minerals: 0,5-1,0 %		
	Other carbohydrates: 0,5-2,0 %		
	Protein: 2,0-2,5 %		
	Extract 2:		
	Fucoidan: 50-55 %		
	Alginate: 2,0-4,0 %		
	Polyphloroglucinol: 1,0-3,0 %		
	Mannitol: 25-35 %		
	Natural salts/Free Minerals: 8-10 %		
	Other carbohydrates: 0,5-2,0 %		
	Protein: 1,0-1,5 %		
2'-Fucosyllactose	Definition:		
(synthetic)	Chemical name: $\alpha$ -L-Fucopyranosyl- $(1\rightarrow 2)$ - $\beta$ -D-galactopyranosyl- $(1\rightarrow 4)$ - D-glucopyranose		
	Chemical formula: C <sub>18</sub> H <sub>32</sub> O <sub>15</sub>		
	CAS No: 41263-94-9		
	Molecular weight: 488,44 g/mol		
	Description:		
	2'-fucosyllactose is a white to off-white powder that is produced by a chemical synthesis process.		
	Purity:		
	2'-Fucosyllactose: ≥ 95 %		
	D-Lactose: $\leq 1.0 \text{ w/w } \%$		
	L-Fucose: ≤ 1,0 w/w %		
	Difucosyl- D-lactose isomers: ≤ 1,0 w/w %		
	2'-Fucosyl- D-lactulose: ≤ 0,6 w/w %		
	pH (20 °C, 5 % solution): 3,2-7,0		
	Water (%): ≤ 9,0 %		
	Ash, sulphated: $\leq 0.2 \%$		

Authorised Novel Food	Specifications	
	Acetic acid: ≤ 0,3 %  Residual solvents (methanol, 2-propanol, methyl acetate, acetone): ≤ 50,0 mg/kg singly, ≤ Residual proteins: ≤ 0,01 %  Heavy Metals:  Palladium: ≤ 0,1 mg/kg  Nickel: ≤ 3,0 mg/kg  Microbiological criteria:  Aerobic mesophilic bacteria total count: ≤ 500 CFU/g  Yeasts and Moulds: ≤ 10 CFU/g  Residual endotoxins: ≤ 10 EU/mg	≤ 200,0 mg/kg in combination
2'-Fucosyllactose (microbial source)	Definition: Chemical name: α-L-Fucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→4)-D-glucopyranose Chemical formula: C <sub>18</sub> H <sub>32</sub> O <sub>15</sub> CAS No: 41263-94-9 Molecular weight: 488,44 g/mol  Source:	Source:
	Genetically modified strain of <i>Escherichia coli</i> K-12  Description:  2'-Fucosyllactose is a white to off-white powder that is produced by a microbial process.  Purity:  2'-Fucosyllactose: ≥ 90 %  D-Lactose: ≤ 3,0 %  L-Fucose: ≤ 2,0  Difucosyl-D-lactose: ≤ 2,0 %  2'-Fucosyl-D-lactulose: ≤ 1,0 %  pH (20 °C, 5 % solution): 3,0-7,5  Water: ≤ 9,0 %	Genetically modified strain of <i>Escherichia coli</i> BL21  Description:  2'-Fucosyllactose is a white to off white powder and the liquid concentrate (45 % ± 5 % w/v) aqueous solution is a colourless to slight yellow clear aqueous solution. 2'-Fucosyllactose is produced by a microbiological process.  Purity:  2'-Fucosyllactose: ≥ 90 %  Lactose: ≤ 5,0 %  Fucose: ≤ 3,0 %  3-Fucosyllactose: ≤ 5,0 %  Fucosylgalactose: ≤ 5,0 %  Difucosyllactose: ≤ 5,0 %

Authorised Novel Food	Specifications		
	Sulphated ash: ≤ 2,0 %	Glucose: ≤ 3,0 %	
	Acetic acid: ≤ 1,0 %	Galactose: ≤ 3,0 %	
	Residual proteins: ≤ 0,01 %	Water: $\leq 9.0 \%$ (powder)	
	Microbiological criteria:	Ash, sulphated: ≤ 0,5 % (powder and liquid)	
	Aerobic mesophilic bacteria total count: ≤ 3 000 CFU/g	Residual proteins: $\leq 0.01$ % (powder and liquid)	
	Yeasts: ≤ 100 CFU/g	Heavy Metals:	
	Moulds: ≤ 100 CFU/g	Lead: $\leq 0.02$ mg/kg (powder and liquid);	
	Endotoxins: ≤ 10 EU/mg	Arsenic: ≤ 0,2 mg/kg (powder and liquid)	
		Cadmium: $\leq 0.1$ mg/kg (powder and liquid)	
		Mercury: ≤ 0,5 mg/kg (powder and liquid)	
		Microbiological criteria:	
		Total plate count: $\leq 10^4$ CFU/g (powder), $\leq 5~000$ CFU/g (liquid	
		Yeasts and Moulds: ≤ 100 CFU/g (powder); ≤ 50 CFU/g (liquid	
		Enterobacteriaceae/Coliforms: absence in 11g (powder and liquid)	
		Salmonella: negative/100 g (powder), negative/200 ml (liquid)	
		Cronobacter: negative/100 g (powder), negative/200 ml (liquid	
		Endotoxins: ≤ 100 EU/g (powder), ≤ 100 EU/ml (liquid)	
		Aflatoxin M1: $\leq 0,025 \mu g/kg$ (powder and liquid)	
Galacto-oligosaccharide	Description/Definition:	1	
	Galacto-oligosaccharide is produced from milk lactose by an enzymatic process using β-galactosidases from Aspergillus oryzae, Bifidobacterium bifidum, Pichia pastoris, Sporobolomyces singularis, Kluyveromyces lactis, Bacillus circulans, and Papiliotrema terrestris.		
	GOS: min 46 % Dry Matter (DM)		
	Lactose: max 40 % DM		
	Glucose: max 27 % DM		
	Galactose: min 0,8 % DM		
	Ash: max 4,0 % DM		
	Protein: max 4,5 % DM		
	Nitrite: max. 2 mg/kg		

Authorised Novel Food	Specifications
Glucosamine HCl from Aspergillus	White crystalline odourless powder
niger and genetically modified	Molecular formula: C <sub>6</sub> H <sub>13</sub> NO <sub>5</sub> · HCl
strain of E. coli K-12	Relative molecular mass: 215,63 g/mol
	D-Glucosamine HCl 98,0-102,0 % of reference standard (HPLC)
	Specific rotation $+70.0^{\circ} - +73.0^{\circ}$
Glucosamine sulphate KCl from	White crystalline odourless powder
Aspergillus niger and genetically modified strain of E. coli K-12	Molecular formula: $(C_6H_{14}NO_5)_2SO_4 \cdot 2KCl$
modified strain of E. Cott K-12	Relative molecular mass: 605,52 g/mol
	D-Glucosamine Sulphate 2KCl 98,0-102,0 % of reference standard (HPLC)
	Specific Rotation +50,0° to +52,0°
Glucosamine sulphate NaCl from	White crystalline odourless powder
Aspergillus niger and genetically modified strain of E. coli K-12	Molecular formula: (C <sub>6</sub> H <sub>14</sub> NO <sub>5</sub> ) <sub>2</sub> SO <sub>4</sub> · 2NaCl
modified strain of E. cott K-12	Relative molecular mass: 573,31 g/mol
	D-Glucosamine HCl: 98-102 % of reference standard (HPLC)
	Specific Optical Rotation: +52° - +54°
Guar Gum	Description/Definition:
	Native guar gum is the ground endosperm of seeds from natural strains of guar <i>Cyamopsis tetragonolobus</i> L. Taub. ( <i>Leguminosae</i> family). It consists of a high molecular weight polysaccharide, primarily composed of galactopyranose and mannopyranose units combined through glycosidic linkages, which may be described chemically as a galactomannan (galactomannan content not less than 75 %).
	Appearance: White to yellowish powder
	Molecular weight: Between 50 000 – 8 000 000 Daltons
	CAS number: 9000-30-0
	Einecs Number: 232-536-8
	Purity: As specified by Commission Regulation (EU) No 231/2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council (1) & by Commission Implementing Regulation (EU) 2015/175 of 5 February 2015 laying down special conditions applicable to the import of guar gum originating in or consigned from India due to contamination risks by pentachlorophenol and dioxins (2).

Authorised Novel Food	Specifications
	Physico-chemical properties:
	Powder
	Shelf-life: 2 years
	Colour: White
	Odour: Light
	Average diameter of particles: 60-70µm
	Moisture: Max 15 %
	Viscosity * at 1 hour —
	Viscosity * at 2 hours: Min 3 600 mPa.s
	Viscosity * at 24 hours: Min 4 000 mPa.s
	Solubility: Soluble in hot and cold water
	pH for 10g/L, at 25 °C - 6-7,5
	Flakes
	Useful life: 1 year
	Colour: White/off white with absence or minimal presence of black spots
	Odour: Light
	Average diameter of particles: 1-10 mm
	Moisture: Max 15 %
	Viscosity * at 1 hour: Min 3 000 mPa.s
	Viscosity * at 2 hours —
	Viscosity * at 24 hours —
	Solubility — Soluble in hot and cold water
	pH for 10g/L, at 25 °C - 5-7,5
	(*) The measurements of viscosity are carried out under the following conditions: 1 %, 25 °C, 20 rpm
Heat-treated milk products	Description/Definition:
fermented with Bacteroides xylani- solvens	Heat-treated fermented milk products are produced with <i>Bacteroides xylanisolvens</i> (DSM 23964) as starter culture.

Semi-skimmed milk (between 1,5 % and 1,8 % fat) or skimmed milk (0,5 % fat or less) is pasteurised or ultra-heat-treated before starting the fermentation wi <i>Bacteroides xylanisolvens</i> (DSM 23964). The resulting fermented milk product is homogenised and then heat-treated to inactivate <i>Bacteroides xylanisolvens</i> (DS 23964). The final product does not contain viable cells of <i>Bacteroides xylanisolvens</i> (DSM 23964)(1).
(¹) Modified DIN EN ISO 21528-2.
Description/Definition:
Hydroxytyrosol is a pale yellow viscous liquid obtained by chemical synthesis
Molecular formula: C <sub>8</sub> H <sub>10</sub> O <sub>3</sub>
Molecular weight: 154,6 g/mol
CAS No: 10597-60-1
Moisture $\leq 0.4 \%$
Odour: CharacteristicTaste: Slightly bitter
Solubility (water): Miscible with water
pH: 3,5-4,5
Refractive Index: 1,571-1,575
Purity:
Hydroxytyrosol: ≥ 99 %
Acetic acid: $\leq 0.4 \%$
Hydroxytyrosol acetate: ≤ 0,3 %
Sum of homovanillic acid, iso-homovanilic acid, and 3-methoxy-4hydroxyphenylglycol: ≤ 0,3 %
Heavy Metals
Lead: $\leq 0.03 \text{ mg/kg}$
Cadmium: ≤ 0,01 mg/kg
Mercury: $\leq 0.01 \text{ mg/kg}$
Residual Solvents
Ethyl acetate: ≤ 25,0 mg/kg
Isopropanol: $\leq 2,50 \text{ mg/kg}$
Methanol: $\leq 2,00 \text{ mg/kg}$
Tetrahydrofuran: ≤ 0,01 mg/kg
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Authorised Novel Food	Specifications	
Ice Structuring Protein type III HPLC 12	Description/Definition:  The Ice Structuring Protein (ISP) preparation is a light-brown liquid produced by submerged fermentation of a genetically-modified strain of food-grade baker's yeast ( <i>Saccharomyces cerevisiae</i> ) in which a synthetic gene for the ISP has been inserted into the yeast's genome. The protein is expressed and secreted into the growth medium where it is separated from the yeast cells by micro-filtration and concentrated by ultra-filtration. As a result, the yeast cells are not transferred into the ISP preparation as such or under an altered form. The ISP preparation consists of native ISP, glycosylated ISP and proteins and peptides from the yeast and sugars as well as acids and salts commonly found in food. The concentrate is stabilised with 10 mM citric acid buffer. Assay: ≥ 5 g/l active ISP  pH: 2,5-3,5  Ash: ≤ 2,0 %  DNA: Not detectable	
Aqueous extract of dried leaves of Ilex guayusa	Description/Definition:  Dark brown liquid. Aqueous extracts of dried leaves of <i>Ilex guayusa</i> .  Composition:  Protein: < 0,1 g/100 ml  Fat: < 0,1 g/100 ml  Carbohydrate: 0,2–0,3 g/100 ml  Total sugars: < 0,2 g/100 ml  Caffeine: 19,8–57,7 mg/100 ml  Theobromine: 0,14–2,0 mg/100 ml  Chlorogenic acids: 9,9–72,4 mg/100ml	
Isomalto-oligosaccharide	Powder: Solubility (water) (%): > 99 Glucose (% dry basis): $\leq 5,0$ Isomaltose + DP3 to DP9 (% dry basis): $\geq 90$ Moisture (%): $\leq 4,0$ Sulphated $ash(g/100 g)$ : $\leq 0,3$ Heavy metals: Lead $(mg/kg)$ : $\leq 0,5$ Arsenic $(mg/kg)$ : $\leq 0,5$	

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Authorised Novel Food	Specifications
	Syrup:
	Dried solids $(g/100 \text{ g})$ : > 75
	Glucose (% dry basis): $\leq 5.0$
	Isomaltose + DP3 to DP9 (% dry basis): ≥ 90
	pH: 4 - 6
	Sulphated $ash(g/100 g)$ : $\leq 0.3$
	Heavy metals:
	Lead (mg/kg): $\leq 0.5$
	Arsenic (mg/kg): $\leq 0.5$

## Isomaltulose

# **Description/Definition:**

A reducing disaccharide that consists of one glucose and one fructose moiety linked by an alpha-1,6-glycosidic bond. It is obtained from sucrose by an enzymatic process. The commercial product is the monohydrate. Appearance: Virtually odourless, white or almost white crystals with a sweet taste

Chemical name:  $6\text{-O-}\alpha\text{-D-glucopyranosyl-D-fructofuranose}$ , monohydrate

CAS No.: 13718-94-0

Chemical formula: C<sub>12</sub>H<sub>22</sub>O<sub>11</sub> · H<sub>2</sub>O

Structural formula

Formula weight: 360,3 (monohydrate)

Authorised Novel Food	Specifications
	Purity: Assay: ≥ 98 % on the dry basis
	Loss on drying: $\leq 6.5 \%$ (60 °C, 5 hours)
	Heavy metals:
	Lead: $\leq 0.1$ mg/kg
	Determine using an atomic absorption technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on the principles of the method described in FNP 5(1), 'Instrumental methods'
	(¹) Food and Nutrition Paper 5 Rev. 2 — Guide to specifications for general notices, general analytical techniques, identification tests, test solutions and other reference materials (JECFA), 1991, 322 pp., English, ISBN 92-5-102991-1.
Lactitol	Description/Definition:
	Crystalline powder or colourless solution manufactured via catalytic hydrogenation of lactose. Crystalline products occur in anhydrous, monohydrate and dihydrate forms. Nickel is used as a catalyst.
	Chemical name: 4-O-β-D-Galactopyranosyl-D-glucitol
	Chemical formula: C <sub>12</sub> H <sub>24</sub> O <sub>11</sub>
	Molecular weight: 344,31 g/mol
	CAS No: 585-86-4
	Purity:
	Solubility (in water): Very soluble in water
	Specific rotation $[\alpha]_D^{20} = +13^\circ \text{ to } +16^\circ$
	Assay: ≥ 95 % d.b (d.b — expressed on the dry weight basis)
	Water: ≤ 10,5 %
	Other polyols: $\leq 2.5 \% \text{ d.b}$
	Reducing sugars: ≤ 0,2 % d.b
	Chlorides: ≤ 100 mg/kg d.b
	Sulphates: ≤ 200 mg/kg d.b
	Sulphated ash: ≤ 0,1 % d.b
	Nickel: ≤ 2,0 mg/kg d.b
	Arsenic: ≤ 3,0 mg/kg d.b
	Lead: ≤ 1,0 mg/kg d.b

Lacto-N-neotetraose (synthetic)  Definition: Chemical name: β-D-Galactopyranosyl-(1→4)-2-acetamido-2-deoxy-β-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→4)- D-gluco Chemical formula: C <sub>26</sub> H <sub>45</sub> NO <sub>21</sub> CAS No: 13007-32-4 Molecular weight: 707,63 g/mol Description: Lacto-N-neotetraose is a white to off-white powder. Produced by a chemical synthesis process and is isolated by crystallisation. Purity: Assay (water free): ≥ 96 % D-Lactose: ≤ 1,0 % Lacto-N-triose I1: ≤ 0,3 % Lacto-N-neotetraose fructose isomer: ≤ 0,6 % pH (20 °C, 5 % solution): 5,0-7,0 Water: ≤ 9,0 % Ash, sulphated: ≤ 0,4 % Acetic acid: ≤ 0,3 %Residual solvents (methanol, 2-propanol, methyl acetate, acetone): ≤ 50 mg/kg singly, ≤ 200 mg/kg in combin Residual proteins: ≤ 0,01 % Palladium: ≤ 0,1 mg/kg Nickel: ≤ 3,0 mg/kg Microbiological criteria: Aerobic mesophilic bacteria total count: ≤ 500 CFU/g Yeasts: ≤ 10 CFU/g Moulds: ≤ 10 CFU/g Moulds: ≤ 10 CFU/g			
Chemical formula: C <sub>26</sub> H <sub>45</sub> NO <sub>21</sub> CAS No: 13007-32-4 Molecular weight: 707,63 g/mol  Description:  Lacto-N-neotetraose is a white to off-white powder. Produced by a chemical synthesis process and is isolated by crystallisation.  Purity:  Assay (water free): ≥ 96 % D-Lactose: ≤ 1,0 % Lacto-N-triose II: ≤ 0,3 % Lacto-N-neotetraose fructose isomer: ≤ 0,6 % pH (20 °C, 5 % solution): 5,0-7,0 Water: ≤ 9,0 % Ash, sulphated: ≤ 0,4 % Acetic acid: ≤ 0,3 %Residual solvents (methanol, 2-propanol, methyl acetate, acetone): ≤ 50 mg/kg singly, ≤ 200 mg/kg in combin Residual proteins: ≤ 0,01 % Palladium: ≤ 0,1 mg/kg Nickel: ≤ 3,0 mg/kg Microbiological criteria: Aerobic mesophilic bacteria total count: ≤ 500 CFU/g Yeasts: ≤ 10 CFU/g Moulds: ≤ 10 CFU/g	Definition:		
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Description:  Lacto- <i>N</i> -neotetraose is a white to off-white powder. Produced by a chemical synthesis process and is isolated by crystallisation.  Purity:  Assay (water free): ≥ 96 %  D-Lactose: ≤ 1,0 %  Lacto-N-triose II: ≤ 0,3 %  Lacto-N-neotetraose fructose isomer: ≤ 0,6 %  pH (20 °C, 5 % solution): 5,0-7,0  Water: ≤ 9,0 %  Ash, sulphated: ≤ 0,4 %  Acetic acid: ≤ 0,3 %Residual solvents (methanol, 2-propanol, methyl acetate, acetone): ≤ 50 mg/kg singly, ≤ 200 mg/kg in combin Residual proteins: ≤ 0,01 %  Palladium: ≤ 0,1 mg/kg  Nickel: ≤ 3,0 mg/kg  Microbiological criteria:  Aerobic mesophilic bacteria total count: ≤ 500 CFU/g  Yeasts: ≤ 10 CFU/g  Moulds: ≤ 10 CFU/g			
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Water: ≤ 9,0 % Ash, sulphated: ≤ 0,4 % Acetic acid: ≤ 0,3 %Residual solvents (methanol, 2-propanol, methyl acetate, acetone): ≤ 50 mg/kg singly, ≤ 200 mg/kg in combin Residual proteins: ≤ 0,01 % Palladium: ≤ 0,1 mg/kg Nickel: ≤ 3,0 mg/kg  Microbiological criteria: Aerobic mesophilic bacteria total count: ≤ 500 CFU/g Yeasts: ≤ 10 CFU/g Moulds: ≤ 10 CFU/g			
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Residual proteins: ≤ 0,01 %  Palladium: ≤ 0,1 mg/kg  Nickel: ≤ 3,0 mg/kg  Microbiological criteria:  Aerobic mesophilic bacteria total count: ≤ 500 CFU/g  Yeasts: ≤ 10 CFU/g  Moulds: ≤ 10 CFU/g			
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Nickel: ≤ 3,0 mg/kg  Microbiological criteria:  Aerobic mesophilic bacteria total count: ≤ 500 CFU/g  Yeasts: ≤ 10 CFU/g  Moulds: ≤ 10 CFU/g			
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Aerobic mesophilic bacteria total count: ≤ 500 CFU/g Yeasts: ≤ 10 CFU/g Moulds: ≤ 10 CFU/g			
Yeasts: ≤ 10 CFU/g Moulds: ≤ 10 CFU/g			
Moulds: $\leq 10 \text{ CFU/g}$			
Project of the first of the fir			
Residual endotoxins: ≤ 10 EU/mg			
Lacto-N-neotetraose Definition:			
(microbial source) Chemical name: β-D-Galactopyranosyl-(1→4)-2-acetamido-2-deoxy-β-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→4)-D-glucopyranosyl-(1→4)-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→4)-D-glucopyranosyl-(1→4)-D-glucopyranosyl-(1→4)-D-glucopyranosyl-(1→3)-β-D-galactopyranosyl-(1→4)-D-glucopyranosyl-(	yranose		
Chemical formula: C <sub>26</sub> H <sub>45</sub> NO <sub>21</sub>			
CAS No: 13007-32-4			
Molecular weight: 707,63 g/mol			

Authorised Novel Food	Specifications
	Source:
	Genetically modified strain of <i>Escherichia coli</i> K-12
	Description:
	Lacto- <i>N</i> -neotetraose is a white to off-white powder that is produced by a microbiological process. Lacto- <i>N</i> -neotetraose is isolated by crystallisation.
	Purity:
	Assay (water free): $\geq 92\%$
	D-Lactose: $\leq 3.0 \%$
	Lacto-N-triose II: ≤ 3,0 %
	para-Lacto-N-neohexaose: ≤ 3,0 %
	Lacto-N-neotetraose fructose isomer: ≤ 1,0 %
	pH (20 °C, 5 % solution): 4,0-7,0
	Water: ≤ 9,0 %
	Ash, sulphated: $\leq 0.4 \%$
	Residual solvents (methanol): ≤ 100 mg/kg
	Residual proteins: ≤ 0,01 %
	Microbiological criteria:
	Aerobic mesophilic bacteria total count: ≤ 500 CFU/g
	Yeasts: ≤ 10 CFU/g
	Moulds: $\leq 10 \text{ CFU/g}$
	Residual endotoxins: ≤ 10 EU/mg
120	
120	
Lonicera caerulea L. berries	Description/Definition:
(haskap)	The traditional food are fresh and frozen berries from <i>Lonicera caerulea</i> var. edulis.
(Traditional food from a third	Lonicera caerulea L. is a deciduous shrub belonging to the Caprifoliaceae family.
country)	Typical nutritional components of haskap berries (given in fresh berries):
	Carbohydrates: 12,8 %
	Fibre: 2,1 %
	Lipids: 0,6 %
	Proteins: 0,7 %

# **▼**<u>M20</u>

**▼**<u>M9</u>

Authorised Novel Food	Specifications
	Ash: 0,4 %
	Water: 85,5 %
Lucerne leaf extract from	Description/Definition:
Medicago sativa	The Lucerne (Medicago sativa L.) is processed within 2 hours after harvest. It is chopped and crushed. By passing through an oleaginous-type press, the Lucerne provides a fibrous residue and press juice (10 % of dry matter). The dry matter of this juice contains about 35 % of crude protein. The press juice (pH 5,8-6,2) is neutralised. Preheating and vapour injection allows coagulation of proteins associated with carotenoid and chlorophyll pigments. The protein precipitate is separated by centrifugation and thereafter dried. After adding ascorbic acid the Lucerne protein concentrate is granulated and stored in inert gas or in cold storage.
	Composition:
	Protein: 45-60 %
	Fat: 9-11 %
	Free carbohydrates (soluble fibre): 1-2 %
	Polysaccharides (insoluble fibre): 11-15 %
	including cellulose: 2-3 %
	Minerals: 8-13 %
	Saponins: ≤ 1,4 %
	Isoflavones: ≤ 350 mg/kg
	Coumestrol: ≤ 100 mg/kg
	Phytates: ≤ 200 mg/kg
	L-canavanine: ≤ 4,5 mg/kg
Lycopene	Description/Definition:
	Synthetic lycopene is produced by the Wittig condensation of synthetic intermediates commonly used in the production of other carotenoids used in food. Synthetic lycopene consists of $\geq 96$ % lycopene and minor quantities of other related carotenoid components. Lycopene is presented either as a powder in a suitable matrix or an oily dispersion. The colour is dark red or red-violet. Antioxidative protection has to be assured.
	Chemical name: Lycopene
	CAS No.: 502-65-8 (all-trans lycopene)
	Chemical formula: C <sub>40</sub> H <sub>56</sub>
	Formula weight: 536,85 Da

Authorised Novel Food	Specifications		
Lycopene from <i>Blakeslea trispora</i>	Description/Definition:		
	The purified lycopene from <i>Blakeslea trispora</i> consists of $\geq 95$ % lycopene and $\leq 5$ % other carotenoids. It is presented either as a powder in a suitable matrix or an oily dispersion. The colour is dark red or red-violet. Anti-oxidative protection has to be assured.		
	Chemical name: Lycopene		
	CAS No.: 502-65-8 (all trans lycopene)		
	Chemical formula: C <sub>40</sub> H <sub>56</sub>		
	Formula weight: 536,85 Da		
Lycopene from tomatoes	Description/Definition:		
	The purified lycopene from tomatoes ( <i>Lycopersicon esculantum</i> L.) consists of $\geq 95$ % lycopene and $\leq 5$ % other carotenoids. It is presented either as a powder in a suitable matrix or an oily dispersion. The colour is dark red or red-violet. Anti-oxidative protection has to be assured.		
	Chemical name: Lycopene		
	CAS No.: 502-65-8 (all trans lycopene)		
	Chemical formula: C <sub>40</sub> H <sub>56</sub>		
	Formula weight: 536,85 Da		
Lycopene oleoresin from tomatoes	Description/Definition:		
, <u>.</u> .	Lycopene oleoresin from tomatoes is obtained by solvent extraction of ripe tomatoes ( <i>Lycopersicon esculentum Mill.</i> ) with subsequent removal of the solvent. It is a red to dark brown viscous, clear liquid.		
	Total lycopene: 5-15 %		
	Thereof trans-lycopene: 90-95 %		
	Total carotenoids (calculated as lycopene): 6,5-16,5 %		
	Other carotenoids: 1,75 %		
	(Phytoene/phytofluene/β-carotene): (0,5-0,75/0,4-0,65/0,2-0,35 %)		
	Total tocopherols: 1,5-3,0 %		
	Unsaponifiable matter: 13-20 %		
	Total fatty acids: 60-75 %		
	Water (Karl Fischer): ≤ 0,5 %		

Authorised Novel Food	Specifications		
Magnesium citrate malate	Description/Definition:		
	Magnesium citrate malate is a white to yellowish-white, amorphous powder. Chemical formula: Mg <sub>5</sub> (C <sub>6</sub> H <sub>5</sub> O <sub>7</sub> ) <sub>2</sub> (C <sub>4</sub> H <sub>4</sub> O <sub>5</sub> ) <sub>2</sub>		
	Chemical name: Pentamagnesium di-(2-hydroxybutanedioate)-di-(2- hydroxypropane-1,2,3-tricarboxylate)		
	CAS No.: 1259381-40-2		
	Molecular weight: 763,99 Daltons (anhydrous)		
	Solubility: Freely soluble in water (about 20 g in 100 ml)		
	Description of the physical state: Amorphous powder		
	Assay magnesium: 12,0-15,0 %		
	Loss on drying (120 °C/4 hours): $\leq$ 15 %		
	Colour (solid): White to yellowish-white		
	Colour (20 % aqueous solution): Colourless to yellowish		
	Appearance (20 % aqueous solution): Clear solution		
	pH (20 % aqueous solution): Approx. 6,0		
	Impurities:		
	Chloride: ≤ 0,05 %		
	Sulphate: $\leq 0.05\%$		
	Arsenic: ≤ 3,0 ppm		
	Lead: $\leq 2.0$ ppm		
	Cadmium: ≤ 1 ppm		
	Mercury: $\leq 0.1$ ppm		
Magnolia Bark Extract	Description/Definition:		
	Magnolia bark extract is obtained from the bark of the plant <i>Magnolia officinalis</i> L. and produced with supercritical carbon dioxide. The bark is washed and oven dried to reduce moisture content before being crushed and extracted with supercritical carbon dioxide. The extract is dissolved in medical-grade ethanol and re-crystallised to yield magnolia bark extract.		
	Magnolia bark extract is mainly composed of two phenolic compounds, magnolol and honokiol.		
	Appearance: Light brownish powder		
	Purity:		
	Magnolol: ≥ 85,2 %		
	Honokiol: $\geq 0.5\%$		

Authorised Novel Food	Specifications
	Magnolol & Honokiol: ≥ 94 %
	Total Eudesmol: ≤ 2 %
	Moisture: 0,50 %
	Heavy metals:
	Arsenic (ppm): $\leq 0.5$
	Lead (ppm): $\leq 0.5$
	Methyl eugenol (ppm): ≤ 10
	Tubocurarine (ppm): $\leq 2.0$
	Total Alkaloid (ppm): ≤ 100
Maize-germ oil high in unsapo-	Description/Definition:
nifiable matter	Maize-germ oil high in unsaponifiable matter is produced by vacuum distillation and it is different from refined maize-germ oil in the concentration of the unsaponifiable fraction (1,2 g in refined maize-germ oil and 10 g in 'maize-germ oil high in unsaponifiable matter').
	Purity:
	Unsaponifiable matter: > 9,0 g/100 g
	Tocopherols: $\geq 1.3 \text{ g/100 g}$
	α-tocopherol (%): 10-25 %
	β-tocopherol (%): < 3,0 %
	γ-tocopherol (%): 68-89 %
	δ-tocopherol (%): < 7,0 %
	Sterols, triterpenic alcohols, methylsterols: > 6,5 g/100 g
	Fatty acids in triglycerides:
	palmitic acid: 10,0-20,0 %
	stearic acid: < 3,3 %
	oleic acid: 20,0-42,2 %
	linoleic acid: 34,0-65,6 %
	linolenic acid: < 2,0 %
	Acid value: ≤ 6,0 mg KOH/g
	Peroxide value (PV): $\leq 10 \text{ mEq O}_2/\text{kg}$

Authorised Novel Food	Specifications		
	Heavy metals:		
	Iron (Fe): < 1 500 µg/kg		
	Copper (Cu): < 100 µg/kg		
	Impurities:		
	Polycyclic aromatic hydrocarbons (PAH) Benzo(a)pyrene: < 2 μg/kg		
	Treatment with active carbon is required to ensure that polycyclic aromatic hydrocarbons (PAH) are not enriched in the production of 'maize-germ oil high is unsaponifiable matter'		
Methylcellulose	Description/Definition:		
	Methyl cellulose is cellulose obtained directly from natural strains of fibrous plant material and partially etherified with methyl groups.		
	Chemical name: Methyl ether of cellulose		
	Chemical formula: The polymers contain substituted anhydroglucose units with the following general formula:		
	C6H7O2(OR1)(OR2)(OR3) where R1, R2, R3 each may be one of the following:		
	— Н		
	— $\mathrm{CH_3}$ or		
	— CH <sub>2</sub> CH <sub>3</sub>		
	Molecular weight: Macromolecules: from about 20 000 (n about 100) up to about 380 000 g/mol (n about 2 000)		
	Assay: Content not less than 25 % and not more than 33 % of methoxyl groups (-OCH <sub>3</sub> ) and not more than 5 % of hydroxyethoxyl groups (-OCH <sub>2</sub> CH <sub>2</sub> OH		
	Slightly hygroscopic white or slightly yellowish or greyish odourless and tasteless, granular or fibrous powder.		
	Solubility: Swelling in water, producing a clear to opalescent, viscous, colloidal solution. Insoluble in ethanol, ether and chloroform. Soluble in glacial aceti acid.		
	Purity:		
	Loss on drying: ≤ 10 % (105 °C, 3 hours)		
	Sulphated Ash: $\leq 1.5$ % determined at $800 \pm 25$ °C		
	pH: $\geq 5.0$ and $\leq 8.0$ (1 % colloidal solution)		
	Heavy metals:		
	Arsenic: ≤ 3,0 mg/kg		
	Lead: ≤ 2,0 mg/kg		
	Mercury: ≤ 1,0 mg/kg		
	Cadmium: ≤ 1,0 mg/kg		

**▼**<u>M11</u>

Authorised Novel Food	Specifications
1-Methylnicotinamide chloride	Definition:
	Chemical name: 3-carbamoyl-1-methyl-pyridinium chloride
	Chemical formula: C <sub>7</sub> H <sub>9</sub> N <sub>2</sub> OCl
	CAS No: 1005-24-9
	Molecular weight: 172,61 Da
	Description
	1-Methylnicotinamide chloride is white or off-white, crystalline solid produced by a chemical synthesis process.
	Characteristics/Composition
	Appearance: White – off-white, crystalline solid
	Purity: ≥ 98,5 %
	Trigonelline: ≤ 0,05 %
	Nicotinic Acid: ≤ 0,10 %
	Nicotinamide: ≤ 0,10 %
	Largest unknown impurity: ≤ 0,05 %
	Sum of unknown impurities: ≤ 0,20 %
	Sum of all impurities: $\leq 0.50 \%$
	Solubility: soluble in water and methanol. Practically insoluble in 2-propanol and dichloromethane
	Moisture: ≤ 0,3 %
	Loss on drying: $\leq 1,0 \%$
	Residue on ignition: $\leq 0.1 \%$
	Residual Solvents and Heavy Metals
	Methanol: $\leq 0.3\%$
	Heavy metals: $\leq 0,002 \%$
	Microbiological criteria:
	Total aerobic microbial count: ≤ 100 CFU/g
	Mould/yeast: ≤ 10 CFU/g
	Enterobacteriaceae: absence in 1 g
	Pseudomonas aeruginosa: absence in 1 g
	Staphylococcus aureus: absent in 1 g
	CFU: Colony Forming Units

Authorised Novel Food	Specifications		
(6S)-5-methyltetrahydrofolic acid, glucosamine salt			
Monomethylsilanetriol (Organic Silicon)	Description/Definition: Chemical name: Silanetriol, 1-methyl- Chemical formula: CH <sub>6</sub> O <sub>3</sub> Si Molecular weight: 94,14 g/mol CAS No: 2445-53-6		

Authorised Novel Food	Specifications		
	Purity:		
	Organic Silicon (monomethylsilanetriol) preparation (aqueous solution):		
	Acidity (pH): 6,4-6,8		
	Silicon: 100-150 mg Si/l		
	Heavy metals:		
	Lead: $\leq 1,0  \mu g/l$		
	Mercury: $\leq 1.0  \mu \text{g/l}$		
	Cadmium: $\leq 1,0  \mu g/l$		
	Arsenic: $\leq 3.0  \mu \text{g/l}$		
	Solvents:		
	Methanol: ≤ 5,0 mg/kg (residual presence)		
Mycelial extract from Shiitake	Description/Definition:		
mushroom (Lentinula edodes)	The novel food ingredient is a sterile aqueous extract obtained from the mycelium of <i>Lentinula edodes</i> cultivated in a submerged fermentation. It is a light brown, slightly turbid liquid.		
	Lentinan is a $\beta$ -(1-3) $\beta$ -(1-6)-D-glucan which has a molecular weight of approximately $5 \times 10^5$ Daltons, a degree of branching of 2/5 and a triple helical tertiary structure.		
	Purity/Composition of the mycelial extract from Lentinula edodes:		
	Moisture: 98 %		
	Dry matter: 2 %		
	Free glucose: < 20 mg/ml		
	Total protein(1): < 0,1 mg/ml		
	N-containing constituents( <sup>2</sup> ): < 10 mg/ml		
	Lentinan: $0.8 - 1.2 \text{ mg/ml}$		
	(¹) Bradford method		
	(²) Kjeldahl method		
Noni fruit juice (Morinda citrifolia)	Description/Definition:		
	Noni fruits (fruits of <i>Morinda citrifolia</i> L.) are pressed. The obtained juice is pasteurised. An optional fermentation step before or after the pressing may occur.		
	Rubiadin: ≤ 10 µg/kg		
	Lucidin: \leq 10 \mug/kg		

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— EN —
14.02.2019
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-127

# Seeds and skin of

Seeds and skin of the sun-dried fruits of Morinda citrifolia are separated. The obtained pulp is filtered to separate juice from the flesh. Desiccation of the produced juice occurs in one or two ways:

Specifications

Either by atomisation using maize maltodextrins, this mixture is obtained by keeping the rates of inflow of the juice and maltodextrins constant. Or by zeodratation or drying and then mixing with an excipient, this process allows the juice to be dried initially and then mixed with maltodextrins (same amount as used in atomisation).

# Noni fruit puree and concentrate (Morinda citrifolia)

Authorised Novel Food

Noni fruit juice powder (Morinda

citrifolia)

#### **Description/Definition:**

**Description/Definition:** 

The fruits of *Morinda citrifolia* are harvested by hand. Seeds and skin may be separated mechanically from the pureed fruits. After pasteurisation, the puree is packaged in aseptic containers and stored under cold conditions.

Morinda citrifolia concentrate is prepared from M. citrifolia puree by treatment with pectinolytic enzymes (50–60 °C for 1-2 h). Then the puree is heated to inactivate the pectinases and then immediately cooled. The juice is separated in a decanter centrifuge. Afterwards the juice is collected and pasteurised, prior to being concentrated in a vacuum evaporator from a brix of 6 to 8 to a brix of 49 to 51 in the final concentrate.

# **Composition:**

#### Puree:

Moisture: 89-93 % Protein: < 0,6 g/100 g Fat: ≤ 0,4 g/100 g Ash: < 1,0 g/100 g

Total carbohydrates: 5-10 g/100 g

Fructose: 0,5-3,82 g/100 g Glucose: 0,5-3,14 g/100 g Dietary fibre: < 0,5-3 g/100 g

5,15-dimethylmorindol (1):  $\leq 0,254 \mu g/ml$ 

Lucidin (1): Not detectable Alizarin (1): Not detectable Rubiadin (1): Not detectable

Concentrate: Moisture: 48-53 %

Authorised Novel Food	Specifications		
	Protein: 3-3,5 g/100 g		
	Fat: < 0,04 g/100 g		
	Ash: 4,5-5,0 g/100 g		
	Total carbohydrates: 37-45 g/100 g		
	Fructose: 9-11 g/100 g		
	Glucose: 9-11 g/100 g		
	Dietary fibre: 1,5-5,0 g/100 g		
	5,15-dimethylmorindol ( $^1$ ): $\leq 0,254 \mu \text{g/ml}$		
	(1) By an HPLC-UV method developed and validated for the analysis of anthraquinones in Morinda citrifolia puree and concentrate. Limits of detection: 2,5 ng/ml (5,15 dimethylmorindol); 50,0 ng/ml (lucidin); 6,3 ng/ml (alizarin) and 62,5 ng/ml (rubiadin).		
Noni leaves (Morinda citrifolia)	Description/Definition:		
	After cutting, the leaves of <i>Morinda citrifolia</i> are subject to drying and roasting steps. The product has a particle size ranging from broken leaves to coarse powder with fines. It is of greenish brown to brown colour.		
	Purity/Composition:		
	Moisture: < 5,2 %		
	Protein: 17- 20 %		
	Carbohydrate: 55-65 %		
	Ash: 10-13 %		
	Fat: 4-9 %		
	Oxalic acid: < 0,14 %		
	Tannic acid: < 2,7 %		
	5,15-dimethylmorindol: < 47 mg/kg		
	Rubiadin: non detectable, ≤ 10 µg/kg		
	Lucidin: non detectable, ≤ 10 μg/kg		
Noni fruit powder (Morinda citri-	Description/Definition:		
folia)	Noni fruit powder is made from pulped noni ( <i>Morinda citrifolia L.</i> ) fruits by freeze-drying. Fruits are pulped and seeds are removed. After freeze-drying during which water is removed from noni fruits, the remaining noni pulp is milled to a powder and encapsulated.		

Authorised Novel Food	Specifications		
	Purity/Composition		
	Moisture: 5,3-9 %		
	Protein: 3,8-4,8 g/100 g		
	Fat: 1-2 g/100 g		
	Ash: 4,6-5,7 g/100 g		
	Total carbohydrates: 80-85 g/100 g		
	Fructose: 20,4-22,5 g/100 g		
	Glucose: 22-25 g/100 g		
	Dietary fibre: 15,4-24,5 g/100 g		
	5,15-dimethylmorindol ( $^1$ ): $\leq 2,0  \mu g/ml$		
	(1) By an HPLC-UV method developed and validated for the analysis of anthraquinones in Morinda citrifolia fruit powder. Limits of detection: 2,5 ng/ml (5,15 dimethylmorindol)		
Odontella aurita microalgae	Silicon: 3,3 %		
, and the second	Crystalline silica: max 0,1-0,3 % as impurity		
Oil enriched with phytosterols/	Description/Definition:		
phytostanols	Oil enriched with phytosterols/phytostanols is composed of an oil fraction and a phytosterol fraction.		
	Acylglycerol Distribution:		
	Free fatty acids (expressed as oleic acid): ≤ 2,0 %		
	Monoacylglycerols (MAG): ≤ 10 %		
	Diacylglycerols (DAG): ≤ 25 %		
	Triacylglycerols (TAG): Making up the balance		
	Phytosterol fraction:		
	$β$ -sitosterol: $\le 80 \%$		
	$β$ -sitostanol: $\le 15\%$		
	campesterol: ≤ 40 %		
	campestanol: ≤ 5,0 %		
	stigmasterol: ≤ 30 %		
	stigmasterol: ≤ 30 % brassicasterol ≤ 3,0 %		

Authorised Novel Food		Specifications		
	Others:			
	Moisture and volatile: $\leq 0.5 \%$			
	Peroxide value (PV): < 5,0 meq/kg			
	Trans fatty acids: ≤ 1 %			
		uivalent method) of phytosterols/phytostanols:		
			ood have to be free of contaminants, best ensured by a purity of mor	
Oil extracted from squids	Acid value: ≤ 0,5 KOH/g oil			
	Peroxide value (PV): $\leq 5 \text{ meq O}_2/\text{kg}$	g oil		
	p-Anisidine value: ≤ 20			
	Cold test at 0 °C: ≤ 3 hours			
	Moisture: $\leq 0.1 \%$ (w/w)			
	Unsaponifiable matter: ≤ 5,0 %Trans	Unsaponifiable matter: ≤ 5,0 %Trans fatty acids: ≤ 1,0 %		
	Docosahexaeonic acid: ≥ 20 %	Docosahexaeonic acid: ≥ 20 %		
	Eicosapentaenoic acid: ≥ 10 %			
Pasteurised fruit-based preparations produced using	Parameter	Target	Comments	
high-pressure treatment	Fruit storage before high-pressure treatment	Minimum 15 days at − 20 °C	Fruit harvested and stored in conjunction with good/hygienic agricultural and manufacturing practices	
	Fruit added	40 % to 60 % of thawed fruit	Fruit homogenised and added to other ingredients	
	рН	3,2 to 4,2		
	° Brix	7 to 42	Assured by added sugars	
	$a_{ m w}$	< 0,95	Assured by added sugars	
	Final storage	60 days maximum at + 5 °C maximum	Equivalent to storage regimen for conventionally processed product	

Authorised Novel Food	Specifications		
Phosphated maize starch	Description/Definition:		
·	Phosphated maize starch (phosphated distarch phosphate) is a chemically modified resistant starch derived from high amylose starch by combining chemical treatments to create phosphate cross-links between carbohydrate residues and esterified hydroxyl groups.		
	The novel food ingredient is a white or nearly white powder.		
	CAS No: 11120-02-8		
	Chemical formula: $(C_6H_{10}O_5)_n$ $[(C_6H_9O_5)_2PO_2H]x$ $[(C_6H_9O_5)PO_3H_2]y$		
	n = number of glucose units; x, y = degrees of substitution		
	The chemical characteristics of phosphated distarch phosphate:		
	Loss on drying: 10-14 %		
	pH: 4,5-7,5		
	Dietary fibre: ≥ 70 %		
	Starch: 7-14 %		
	Protein: ≤ 0,8 %		
	Lipids: ≤ 0,8 %		
	Residual bound phosphorus: $\leq 0.4$ % (as phosphorus) 'high amylose maize' as source		
Dhambadalania (wa Cal	Description Description		
Phosphatidylserine from fish phospholipids	Description/Definition:		
	The novel food ingredient is yellow to brown powder. Phosphatidylserine is obtained from fish phospholipids by an enzymatic transphosphorylation with the amino acid L-serine.		
	Specification of the phosphatidylserine product manufactured from fish phospholipids:		
	Moisture: < 5,0 %		
	Phospholipids: ≥ 75 %		
	Phosphatidylserine: ≥ 35 %		
	Glycerides: < 4,0 %		
	Free L-serine: < 1,0 %		
	Tocopherols: $< 0.5 \% (^1)$		
	Peroxide value (PV): < 5,0 meq O <sub>2</sub> /kg		
	(1) Tocopherols may be added as antioxidants according to Commission Regulation (EU) No 1129/2011		

Authorised Novel Food	Specifications		
Phosphatidylserine from soya	Description/Definition:		
phospholipids	The novel food ingredient is off-white to light yellow powder. It is also available in liquid form with a clear brown to orange colour. The liquid form contains medium chain triacylglycerides (MCT) as a carrier. It contains lower levels of Phosphatidylserine due to the fact that it includes significant amounts of oil (MCT).		
	Phosphatidylserine from soya phospholipids is obtained through enzymatic transphosphatidylation of high-phosphatidylcholine soybean lecithin with the amino acid L-serine. Phosphatidylserine consists of a glycerophosphate skeleton conjugated with two fatty acids and L-serine via a phosphodiester linkage.		
	Characteristics of Phosphatidylserine from soya phospholipids:		
	Powder form:		
	Moisture: < 2,0 %		
	Phospholipids: ≥ 85 %		
	Phosphatidylserine: ≥ 61 %		
	Glycerides: < 2,0 %		
	free L-serine: < 1,0 %		
	Tocopherols: < 0,3 %		
	Phytosterols: < 0,2 %		
	Liquid form:		
	Moisture: < 2,0 %		
	Phospholipids: ≥ 25 %		
	Phosphatidylserine: ≥ 20 %		
	Glycerides: not applicable		
	free L-serine: < 1,0 %		
	Tocopherols: < 0,3 %		
	Phytosterols: < 0,2 %		
Phospholipid product containing	Description/Definition:		
equal amounts of phosphati- dylserine and phosphatidic acid	The product is manufactured through enzymatic conversion of soy lecithin. The phospholipid product is a highly concentrated, yellow-brown powder form of phosphatidylserine and phosphatidic acid at an equal level.		
	Specification of the product:		
	Moisture: $\leq 2.0 \%$		

Authorised Novel Food	Specifications	
	Total phospholipids: ≥ 70 %	
	Phosphatidylserine: ≥ 20 %	
	Phosphatidic acid: ≥ 20 %	
	Glycerides: ≤ 1,0 %	
	Free L-serine: ≤ 1,0 %	
	Tocopherols: $\leq 0.3\%$	
	Phytosterols: $\leq 2.0 \%$	
	Silicon dioxide is used with a maximum content of 1,0 %	
Phospholipides from egg yolk	85 % and 100 % pure Phospholipides from egg yolk	
Phytoglycogen	<b>Description:</b> White to off-white powder which is an odourless, colourless, flavourless polysaccharide derived from non-GM sweet corn using conventional	
	food processing techniques <b>Definition:</b> Glucose polymer ( $C_6H_{12}O_6$ )n with linear linkages of $\alpha(1-4)$ glycosidic bonds branched every 8 to 12 glucose units by $\alpha(1-6)$ glycosidic bonds	
	Specifications:	
	Carbohydrates: 97 %	
	Sugars: 0,5 %	
	Fibre: 0,8 %	
	Fat: 0,2 %	
	Protein: 0,6 %	
Phytosterols/phytostanols	Description/Definition:	
	Phytosterols and phytostanols are sterols and stanols that are extracted from plants and may be presented as free sterols and stanols or esterified with food grade fatty acids.	
	Composition (with GC-FID or equivalent method):	
	β-sitosterol: < 81 %	
	β-sitostanol: < 35 %	
	campesterol: < 40 %	
	campestanol: < 15 %	

Authorised Novel Food	Specifications
	stigmasterol: < 30 %
	brassicasterol: < 3,0 %
	other sterols/stanols: < 3,0 %
	Contamination/Purity (GC-FID or equivalent method):
	Phytosterols and phytostanols extracted from sources other than vegetable oil suitable for food have to be free of contaminants, best ensured by a purity of more than 99 % of the phytosterol/phytostanol ingredient.
Plum kernel oil	Description/Definition:
	Plum kernel oil is a vegetable oil obtained by cold pressing of plum (Prunus domestica) kernels.
	Composition:
	Oleic acid (C18:1): 68 %
	Linoleic acid (C18:2): 23 %
	γ-Tocopherol:80 % of total tocopherols
	β-Sitosterol: 80-90 % of total sterols
	Triolein: 40-55 % of triglycerides
	Cyanhydric acid: maximum 5 mg/kg oil
Potato proteins (coagulated) and	Dry substance: ≥ 800 mg/g
hydrolysates thereof	Protein (N * 6,25): $\geq$ 600 mg/g (dry substance)
	Ash: $\leq 400 \text{ mg/g (dry substance)}$
	Glycoalkaloid (total): ≤ 150 mg/kg
	Lysinoalanine (total): ≤ 500 mg/kg
	Lysinoalanine (free): ≤ 10 mg/kg
Prolyl oligopeptidase (enzyme	Specification of the enzyme:
preparation)	Systematic name: Prolyl oligopeptidase
	Synonyms: Prolyl endopeptidase, proline-specific endopeptidase, endoprolylpeptidase
	Molecular weight: 66 kDa
	Enzyme Commission number: EC 3.4.21.26
	CAS number: 72162-84-6

Authorised Novel Food

Source: A genetically modified strain of Aspergillus niger (GEP-44)
Description: Prolyl oligopeptidase is available as an enzyme preparation containing approximately 30 % maltodextrin.
Specifications of the enzyme preparation of prolyl oligopeptidase:
Activity: $> 580\ 000\ PPI(^1)/g\ (> 34,8\ PPU(^2)/g)$
Appearance: Microgranulate
Colour: Off-white to orange yellowish. The colour may change from batch to batch
Dry Matter: > 94 %
Gluten: < 20 ppm
Heavy metals:
Lead: $\leq 1.0 \text{ mg/kg}$
Arsenic: ≤ 1,0 mg/kg
Cadmium: $\leq 0.5$ mg/kg
Mercury: $\leq 0.1 \text{ mg/kg}$
Microbiological criteria:
Total aerobic plate count: $\leq 10^3$ CFU/g
Total yeasts and moulds: $\leq 10^2 \text{ CFU/g}$
Sulphite reducing anaerobes: ≤ 30 CFU/g
Enterobacteriaceae: < 10 CFU/g Salmonella: Absence in 25 g
Escherichia coli: Absence in 25 g
Staphylococcus aureus: Absence in 10 g
Pseudomonas aeruginosa: Absence in 10 g
Listeria monocytogenes: Absence in 25 g
Antimicrobial activity: Absent Mycotoxins: Below limits of detection: Aflatoxin B1, B2, G1, G2 (< 0,25 $\mu$ g/kg), total Aflatoxins (< 2,0 $\mu$ g/kg), Ochratoxin A (< 0,20 $\mu$ g/kg), T-2 Toxin (< 5 $\mu$ g/kg), Zearalenone (< 2,5 $\mu$ g/kg), Fumonisin B1 and B2 (< 2,5 $\mu$ g/kg)
(¹) PPI – Protease Picomole International

(²) PPU – Prolyl Peptidase Units or Proline Protease Units

Specifications

02017R2470 -
— EN —
14.02.2019 -
007.001 -
-136

# Authorised Novel Food Specifications Protein extract from pig kidneys **Description/Definition:** The protein extract is obtained from homogenised pig kidneys through a combination of salt precipitation and high speed centrifugation. The obtained precipitate contains essentially proteins with 7 % of the enzyme diamine oxidase (enzyme nomenclature E.C. 1.4.3.22) and is resuspended in a physiologic buffer system. The obtained pig kidney extract is formulated as encapsulated enteric coated pellets to reach the active sites of digestion. Basic Product: Specification: pig kidney protein excerpt with natural content of Diamin oxidase (DAO): Physical condition: liquid Colour: brownish Appearance: slightly turbid solution pH value: 6,4-6,8 Enzymatic activity: > 2 677 kHDU DAO/ml (DAO REA (DAO Radioextractionassay)) Microbiological criteria: Brachyspira spp.: negative (Real Time PCR) Listeria monocytogenes: negative (Real Time PCR) Staphylococcus aureus: < 100 CFU/g Influenza A: negative (Reverse Transcription Real Time PCR) Escherichia coli: < 10 CFU/g Total aerobic microbiological count: < 10<sup>5</sup> CFU/g Yeasts/moulds count: < 10<sup>5</sup> CFU/g Salmonella: Absence/10g Bile salt resistant enterobacteriaceae: < 10<sup>4</sup> CFU/g Final product: Specification pig kidney protein excerpt with natural content of DAO (E.C. 1.4.3.22) in an enteric coated formulation: Physical condition: solid Colour: yellow grayAppearance: micropellets Enzymatic activity: 110-220 kHDU DAO/g pellet (DAO REA (DAO Radioextractionassay)) Acid stability 15 min 0,1M HCl followed by 60 min Borat pH = 9,0: > 68 kHDU DAO/g pellet (DAO REA (DAO Radioextractionassay))

# **▼**<u>M9</u>

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	Authorised Novel Food	Specifications
		Humidity: < 10 %
		Staphylococcus aureus: < 100 CFU/g
		Escherichia coli: < 10 CFU/g
		Total aerobic microbiological count: < 10 <sup>4</sup> CFU/g
		Total combined yeasts/moulds count: < 10 <sup>3</sup> CFU/g
		Salmonella: Absence/10g
		Bile salt resistant enterobacteriaceae: < 10 <sup>2</sup> CFU/g
▼M10		
	Pyrroloquinoline quinone disodium salt	Definition:
		Chemical name: disodium 9-carboxy-4,5-dioxo-1 <i>H</i> -pyrrolo[5,4-f]quinoline-2,7-dicarboxylate
		Chemical formula: C <sub>14</sub> H <sub>4</sub> N <sub>2</sub> Na <sub>2</sub> O <sub>8</sub>
		CAS No: 122628-50-6
		Molecular weight: 374,17 Da
		Description
		Pyrroloquinoline quinone disodium salt is a reddish-brown powder produced by the non-genetically modified bacterium <i>Hyphomicrobium denitrificans</i> strain CK-275.
		Characteristics/Composition
		Appearance: Reddish-brown powder
		Purity: ≥ 99,0 % (dry weight)
		UV absorbance (A322/A259): $0.56 \pm 0.03$
		UV absorbance (A233/A259): $0.90 \pm 0.09$
		Moisture: ≤ 12,0 %
		Residual Solvent
		Ethanol: ≤ 0,05 %
		Heavy metals
		Lead: < 3 mg/kg
		Arsenic: < 2 mg/kg
		I .

# **▼**M10

Authorised Novel Food	Specifications
	Microbiological criteria:
	Total viable cell count: ≤ 300 CFU/g
	Mould/yeast: ≤ 12 CFU/g
	Coliforms: absent in 1 g
	Hyphomicrobium denitrificans: ≤ 25 CFU/g
	CFU: Colony Forming Units

# **▼**<u>M9</u>

# Rapeseed oil high in unsaponifiable matter

# **Description/Definition:**

Rapeseed oil high in unsaponifiable matter' is produced by vacuum distillation and it is different from refined rapeseed oil in the concentration of the unsaponifiable fraction (1 g in refined rapeseed oil and 9 g in 'rapeseed oil high in unsaponifiable matter'). There is a minor reduction of triglycerides containing monounsaturated and polyunsaturated fatty acids.

## **Purity:**

Unsaponifiable matter: > 7,0 g/100 g

Tocopherols: > 0,8 g/100 g α-tocopherol (%): 30-50 % γ-tocopherol (%): 50-70 % δ-tocopherol (%): < 6,0 %

Sterols, triterpenic alcohols, methylsterols: > 5,0 g/100 g

# Fatty acids in triglycerides:

palmitic acid: 3-8 %
stearic acid: 0,8-2,5 %
oleic acid: 50-70 %
linoleic acid: 15-28 %
linolenic acid: 6-14 %
erucic acid: < 2,0 %
Acid value: ≤ 6,0 mg KOH/g
Peroxide value (PV): ≤ 10 mEq O<sub>2</sub>/kg

Authorised Novel Food	Specifications
	Heavy metals:
	Iron (Fe): < 1 000 μg/kg
	Copper (Cu): < 100 µg/kg
	Impurities:
	Polycyclic aromatic hydrocarbons (PAH) Benzo(a)pyrene: < 2 μg/kg
	Treatment with active carbon is required to ensure that polycyclic aromatic hydrocarbons (PAH) are not enriched in the production of 'rapeseed oil high i unsaponifiable matter.
Rapeseed Protein	Definition:
	Rapeseed protein is an aqueous protein-rich extract from rapeseed press cake originating from non-genetically modified Brassica napus L. and Brassica rapa L
	Description:
	White to off-white, spray dried powder
	Total protein: ≥ 90 %
	Soluble protein: ≥ 85 %
	Moisture: ≤ 7,0 %
	Carbohydrates: ≤ 7,0 %
	Fat: $\leq 2.0 \%$
	Ash: ≤ 4,0 %
	Fibre: ≤ 0,5 %
	Total glucosinolates: ≤ 1 mmol/kg
	Purity:
	Total phytate: ≤ 1,5 %
	Lead: $\leq 0.5 \text{ mg/kg}$
	Microbiological criteria:
	Yeast and mould count: ≤ 100 CFU/g
	Aerobic bacteria count: ≤ 10 000 CFU/g
	Total coliform count: ≤ 10 CFU/g
	Escherichia coli: Absence in 10 g
	Salmonella: Absence in 25 g

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Refined	shrimp	peptide

concentrate

Authorised Novel Food

Refined shrimp peptide concentrate is a peptide mixture obtained from northern shrimp (*Pandalus borealis*) shells and heads via a series of purification steps following enzymatic proteolysis using a protease from *Bacillus licheniformis* and/or *Bacillus amyloliquefaciens*.

Specifications

# Characteristics/Composition

Total Dry matter (%):  $\geq$  95,0 %

Peptides (w/weight dry matter): ≥ 87,0 % of which peptides with molecular weight < 2 kDa: ≥ 99,9 %

Fat (w/w):  $\leq 1,0 \%$ 

Description

Carbohydrates (w/w):  $\leq 1,0 \%$ 

Ash (w/w):  $\leq 15,0 \%$ Calcium:  $\leq 2,0 \%$ 

Potassium: ≤ 0,15 %

Sodium: ≤ 3,5 %

# **Heavy Metals**

Arsenic (inorganic):  $\leq 0.22$  mg/kg Arsenic (organic):  $\leq 51.0$  mg/kg

Cadmium:  $\leq 0.09$  mg/kg

Lead:  $\leq 0.18 \text{ mg/kg}$ 

 $Total\ mercury: \leq 0,\!03\ mg/kg$ 

# Microbiological criteria:

Total viable cell count:  $\leq 20~000~CFU/g$ 

Salmonella: ND/25g

Listeria monocytogenes: ND/25g Escherichia coli: ≤ 20 CFU/g

Coagulase positive Staphylococcus aureus: ≤ 200 CFU/g

Pseudomonas aeruginosa: ND/25g

Mould/yeast: ≤ 20 CFU/g CFU: Colony Forming Units

ND: Not Detectable

Authorised Novel Food	Specifications	
Trans-resveratrol	Description/Definition:	
	<b>Synthetic</b> <i>Trans</i> -resveratrol is off-white to beige crystals.	
	Chemical name: 5-[(E)-2-(4-hydroxyphenyl)ethenyl]benzene-1,3-diol	
	Chemical formula: C <sub>14</sub> H <sub>12</sub> O <sub>3</sub>	
	Molecular weight: 228,25 Da	
	CAS No: 501-36-0	
	Purity:	
	<i>Trans</i> -resveratrol: ≥ 98 %-99 %	
	Total by-products (related substances): $\leq 0.5 \%$	
	Any single related substance: ≤ 0,1 %	
	Sulphated ash: $\leq 0.1 \%$	
	Loss on drying: ≤ 0,5 %	
	Heavy metals:	
	Lead: ≤ 1,0 ppm	
	Mercury: $\leq 0.1$ ppm	
	Arsenic: ≤ 1,0 ppm	
	Impurities:	
	Diisopropylamine: ≤ 50 mg/kg	
	Microbial source: A genetically modified strain of Saccharomyces cerevisiae	
	Appearance: Off-white to slight yellow powder	
	Particle size: 100 % less than 62,23 μm	
	Trans-resveratrol content: Min. 98 % w/w (dry weight basis)	
	Ash: Max. 0,5 % w/w	
	Moisture: Max. 3 % w/w	
Paceton comb extract	Description/Definition.	
Rooster comb extract	<b>Description/Definition:</b> Rooster comb extract is obtained from <i>Gallus gallus</i> by enzymatic hydrolysis of rooster comb and by subsequent filtration, concentration and precipitation steps. The principal constituents of rooster comb extract are the glycosaminoglycans hyaluronic acid, chondroitin sulphate A and dermatan sulphate (chondroitin sulphate B). White or almost white hygroscopic powder.	

Authorised Novel Food	Specifications
	Hyaluronic acid: 60-80 %
	Chondroitin sulphate A: ≤ 5,0 %
	Dermatan sulphate (chondroitin sulphate B): ≤ 25 %
	pH: 5,0-8,5
	Purity:
	Chlorides: ≤ 1,0 %
	Nitrogen: $\leq 8.0 \%$
	Loss on drying: (105 °C for 6 hours): $\leq$ 10 %
	Heavy metals:
	Mercury: ≤ 0,1 mg/kg
	Arsenic: ≤ 1,0 mg/kg
	Cadmium: ≤ 1,0 mg/kg
	Chromium: ≤ 10 mg/kg
	Lead: $\leq 0.5 \text{ mg/kg}$
	Microbiological criteria:
	Total viable aerobic count: $\leq 10^2$ CFU/g
	Escherichia coli: Absence in 1 g
	Salmonella: Absence in 1 g
	Staphylococcus aureus: Absence in 1 g
	Pseudomonas aeruginosa: Absence in 1g
Sacha Inchi oil from <i>Plukenetia</i> volubilis	Description/Definition:
	Sacha inchi oil is a 100 % cold pressed vegetable oil obtained from the seeds of <i>Plukenetia volubiis</i> L. It is a transparent, fluid (liquid) and shiny oil at room temperature. It has a fruity, light, green vegetable taste without undesirable flavours.
	Aspect, limpidity, shine, colour: Fluid at room temperature, clean, shiny yellow gold
	Odour and taste: Fruity, vegetable without non acceptable taste or odour

Authorised Novel Food	Specifications
	Purity:
	Water and Volatiles: < 0,2 g/100 g
	Impurities insoluble in hexane: < 0,05 g/100 g
	Oleic acidity: < 2,0 g/100 g
	Peroxide value (PV): $< 15 \text{ meq } O_2/kg$
	Trans fatty acids: < 1,0 g/100 g
	Total unsaturated fatty acids: > 90 %Omega 3 alpha linolenic acid (ALA): > 45 %
	Saturated fatty acids: < 10 %
	No trans fatty acids (< 0,5 %)
	No erucic acid (< 0,2 %)
	More than 50 % of tri-linolenin and di-linolenin-triglycerides
	Phytosterols composition and level
	No cholesterol (< 5,0 mg/100 g)
Salatrims	Description/Definition:
Salatiniis	Salatrim is the internationally recognised acronym for (short and long chain acyl triglyceride molecules). Salatrim is prepared by non-enzymatic
	inter-esterification of triacetin, tripropionin, tributyrin, or their mixtures with hydrogenated canola, soybean, cottonseed, or sunflower oil. Description: Clear, slightly amber liquid to a light coloured waxy solid at room temperature. Free of particulate matter and of foreign or rancid odour.
	Glycerol ester disribution:
	Triacylglycerols: > 87 %
	Diacylglycerols: ≤ 10 %
	Monoacylglycerols: ≤ 2,0 %
	Fatty acid composition:
	MOLE % LCFA (long chain fatty acids): 33-70 %

Authorised Novel Food	Specifications
	MOLE % SCFA (short chain fatty acids): 30-67 %
	Saturated long chain fatty acids: < 70 % by weight
	Trans fatty acids: ≤ 1,0 %
	Free fatty acids as oleic acid: $\leq 0.5 \%$
	Triacylglycerol profile:
	Triesters (short/long of 0,5 to 2,0): $\geq$ 90 %
	Triesters (short/long = 0): $\leq 10 \%$
	Unsaponifiable material: ≤ 1,0 %
	Moisture: $\leq 0.3 \%$
	Ash: $\leq 0.1 \%$
	Colour: ≤ 3,5 Red (Lovibond)
	Peroxide value (PV): ≤ 2,0 Meq/Kg
Schizochytrium sp. oil rich in DHA and EPA	
	Peroxide value (PV): $\leq 5.0$ meq/kg oil
	Oxidative stability: All food products containing <i>Schizochytrium sp.</i> oil rich in DHA and EPA should demonstrate oxidative stability by appropriate and recognised national/international test methodology (e.g. AOAC)
	Moisture and volatiles: ≤ 0,05 %
	Unsaponifiables: ≤ 4,5 %
	Trans-fatty acids: ≤ 1 %
	DHA content: ≥ 22,5 %
	EPA content: ≥ 10 %
Schizochytrium sp. (ATCC PTA-9695) oil	Peroxide value (PV): ≤ 5,0 meq/kg oil
	Unsaponifiables: $\leq 3.5\%$
	Trans-fatty acids: $\leq 2.0 \%$
	Free fatty acids: $\leq 2,0\%$
	Docosapentaenoic acid (DPA) n-6: $\leq$ 7,5 %
	DHA content: $\geq 35\%$
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Authorised Novel Food	Specifications
Schizochytrium sp. oil	Acid value: ≤ 0,5 mg KOH/g
• •	Peroxide value (PV): $\leq 5.0$ meq/kg oil
	Moisture and volatiles: ≤ 0,05 %
	Unsaponifiables: ≤ 4,5 %
	Trans-fatty acids: $\leq 1,0 \%$
	DHA content: ≥ 32,0 %
Schizochytrium sp. (T18) oil	Acid value: ≤ 0,5 mg KOH/g
· · · · · · · · · · · · · · · · · · ·	Peroxide value (PV): $\leq 5.0$ meq/kg oil
	Moisture and volatiles: ≤ 0,05 %
	Unsaponifiables: ≤ 3,5 %
	Trans-fatty acids: $\leq 2,0 \%$
	Free fatty acids: ≤ 0,4 %
	DHA content: ≥ 35 %
Fermented soybean extract	Description/Definition:
·	Fermented soybean extract is an odourless milk-white coloured powder. It is comprised of 30 % fermented soybean extract powder and 70 % resistant dextrin (as carrier) from corn-starch, which is added during the processing. Vitamin K <sub>2</sub> is removed during the manufacturing process.
	Fermented soybean extract contains nattokinase isolated from natto, a foodstuff produced by the fermentation of non-genetically modified soybeans (Glycine max (L.)) with a selected strain of Bacillus subtilis var. natto.
	Nattokinase activity: 20 000 -28 000 Fibrin degradation unit/g(1)
	Identity: Confirmable
	Condition: No offensive taste or smell
	Loss on drying: ≤ 10 %
	Vitamin $K_2$ : $\leq 0,1$ mg/kg
	Heavy metals:
	Lead: $\leq 5.0 \text{ mg/kg}$
	Arsenic: ≤ 3,0 mg/kg
	Microbiological criteria:
	Total viable aerobic count: $\leq 10^3 \text{ CFU}(^3)/\text{g}$

Authorised Novel Food	Specifications
	Yeast and mould: ≤ 10 <sup>2</sup> CFU/g
	Coliforms: ≤ 30 CFU/g
	Spore-forming bacteria: ≤ 10 CFU/g
	Escherichia coli: Absence/25 g
	Salmonella: Absence/25 g
	Listeria: Absence/25 g
	(1) Assay method as described by Takaoka et al. (2010).
Spermidine-rich wheat germ	Description/Definition:
extract (Triticum aestivum)	Spermidine-rich wheat germ extract is obtained from non-fermented, non-sprouting wheat germs ( <i>Triticum aestivum</i> ) by the process of solid-liquid extraction targeting specifically, but not exclusively polyamines.
	Spermidine: 0,8-2,4 mg/g
	Spermine: 0,4-1,2 mg/g
	Spermidine trichloride < 0,1 μg/gPutrescine: < 0,3 mg/g
	Cadaverine: < 0,1 μg/g
	Mycotoxins:
	Aflatoxins (total): < 0,4 μg/kg
	Microbiological criteria:
	Total aerobic bacteria: < 10 000 CFU/g
	Yeast and moulds: < 100 CFU/g
	Escherichia coli: < 10 CFU/g
	Salmonella: Absence/25g
	Listeria monocytogenes: Absence/25g
	Essier at monocytogenes. Hoselies 205
Sucromalt	Description/Definition:
	Sucromalt is a complex mixture of saccharides which is produced from sucrose and a starch hydrolysate by means of an enzymatic reaction. In this process, glucose units are attached to saccharides from the starch hydrolysate by means of an enzyme produced by the bacterium <i>Leuconostoc citreum</i> or by means of a recombinant strain of the production organism <i>Bacillus licheniformis</i> . The resulting oligosaccharides are characterised by the presence of α-(1→6) and α-(1→3) glycosidic compounds. The overall product is syrup, in addition to these oligosaccharides, contains mainly fructose but also the disaccharide leucrose and other disaccharides.  Total solids: 75-80 %
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Authorised Novel Food	Specifications
	Moisture: 20-25 %
	Sulphatase: Max 0,05 %
	pH: 3,5-6,0
	Conductivity < 200 (30 %)
	Nitrogen < 10 ppm
	Fructose: 35-45 % d.w.
	Leucrose: 7-15 % d.w.
	Other disaccharides: Max 3 %
	Higher saccharides: 40-60 % d.w
Sugar cane fibre	Description/Definition:
	Sugar Cane Fibre is derived from the dry cell wall or fibrous residue remaining after expression or extraction of sugar juice from sugar cane, of the Saccharum genotype. It consists primarily of cellulose and hemicellulose.
	The production process consists of several steps, including: chipping, alkaline digestion, removal of lignins and other non-cellulosic components, bleaching of purified fibres, acid washing and neutralization.
	Moisture: $\leq 7.0 \%$
	Ash: $\leq 0.3 \%$
	Total Dietary Fibre (AOAC) dry basis (all insoluble): ≥ 95 %
	of which: Hemicellulose (20-25 %) and cellulose (70-75 %)
	Silica (ppm): $\leq 200$
	Protein: 0,0 %
	Fat: Trace
	pH: 4-7
	Heavy metals:
	Mercury (ppm): $\leq 0.1$
	Lead (ppm): $\leq 1.0$
	Arsenic (ppm): $\leq 1,0$
	Cadmium (ppm): $\leq 0,1$
	Microbiological criteria:  Yeast and moulds (CFU/g): ≤ 1 000
	Yeast and moulds $(CFO/g)$ : $\leq 1000$ Salmonella: Absence
	Listeria monocytogenes: Absence
	Listeria monocytogenes. Austrice

	Authorised Novel Food	Specifications
	Sunflower oil extract	Description/Definition:
		The sunflower extract is obtained by a concentration factor of 10 of the unsaponifiable fraction of refined sunflower oil extracted from the seeds of the sunflower, <i>Helianthus Annuus</i> L.
		Composition:
		Oleic acid (C18:1): 20 %
		Linoleic acid (C18:2): 70 %
		Unsaponifiable matter: 8,0 %
		Phytosterols: 5,5 %
		Tocopherols: 1,1 %
▼ <u>M22</u>		
	Syrup from Sorghum bicolor (L.)	Description/Definition
	Moench.	The traditional food is syrup from Sorghum bicolor (L.) Moench (genus, Sorghum; family, Poaceae (alt. Gramineae)).
	(Traditional food from a third country)	The syrup is obtained from stalks of <i>S. bicolor</i> , after applying production processes such as crushing, extraction, and evaporation including a heat treatment in order to obtain a minimum of 74 °Brix syrup
		Compositional data of syrup from Sorghum bicolor (L.) Moench
		Water: 22,7 g/100 g
		Ash: 2,4
		Sugars, total: > 74,0 g/100 g
<b>▼</b> <u>M9</u>		
	Dried Tetraselmis chuii microalgae	Description/Definition:
		The dried product is obtained from the marine microalgae <i>Tetraselmis chuii</i> , belonging to the <i>Chlorodendraceae</i> family, cultivated in sterile sea water in closed photobioreactors insulated from the outside air.
		Purity/Composition:
		Identified by means of nuclear marker rDNA 18 S (sequence analysed no less than 1600 base pairs) in the National Centre for Biotechnology information (NCBI) database: Not less than 99,9 %
		Humidity: ≤ 7,0 %
		Proteins: 35-40 %
		Ashes: 14-16 %
		Carbohydrates: 30-32 %

Authorised Novel Food	Specifications
	Fibre: 2-3 %
	Fat: 5-8 %
	Saturated fatty acids: 29-31 % of total fatty acids
	Monounsaturated fatty acids: 21-24 % of total fatty acids
	Polyunsaturated fatty acids: 44-49 % of total fatty acids
	Iodine: ≤ 15 mg/kg
Therapon barcoo/Scortum	Description/Definition:
	Scortum/ <i>Therapon barcoo</i> is a species of fish in the family Terapontidae. It is an endemic fresh water species from Australia. It is now reared in fish farms
	Taxonomic Identification: Class: Actinopterygii > order: Perciformes > family: Terapontidae > genus: Therapon or Scortum barcoo
	Composition of fish flesh:
	Protein (%): 18-25
	Moisture (%): 65-75
	Ash (%): 0,5-2,0
	Energy (KJ/Kg): 6000-11500
	Carbohydrates (%): 0,0
	Fat (%): 5-15
	Fatty acids (mg FA/g fillet):
	Σ PUFA n-3: 1,2-20,0
	Σ PUFA n-6: 0,3-2,0
	PUFA n-3/n-6: 1,5-15,0
	Total omega 3 acids: 1,6-40,0
	Total omega 6 acids: 2,6-10,0
D-Tagatose	Description/Definition:
	Tagatose is produced by isomerization of galactose by means of chemical or enzymatic conversion, or by epimerization of fructose by means of enzymatic conversion. These are single-step conversions.
	Appearance: White or almost white crystals
	Chemical name: D-tagatose

Authorised Novel Food	Specifications
	Synonym: D-lyxo-Hexulose
	CAS number: 87-81-0
	Chemical formula: C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>
	Formula weight: 180,16 (g/mol)
	Purity:
	Assay: ≥ 98 % on a dry weight basis
	Loss on drying: ≤ 0,5 % (102 °C, 2 hours)
	Specific Rotation: $ [\alpha]_D^{20}$ : - 4 to - 5,6° (1 % aqueous solution)(1)
	Melting range: 133– 137 °C
	Heavy metals:
	Lead: $\leq 1.0 \text{ mg/kg(*)}$
	(*) Determine using an atomic absorption technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on the principles of the method described in FNP 5. 'Instrumental methods'(1).
	(1) Food and nutrition paper 5 Rev 2 - Guide to specifications for general notices, general analytical techniques, identification tests, test solutions and other reference materials (JECFA) 1991, 307 p.; English - ISBN 92-5-102991-1
Taxifolin-rich extract	Description:
	Taxifolin-rich extract from the wood of Dahurian Larch (Larix gmelinii (Rupr.) Rupr) is a white to pale-yellow powder that crystallizes from hot aqueous solutions.
	Definition:
	Chemical name: [(2R,3R)-2-(3,4 dihydroxyphenyl)-3,5,7-trihydroxy-2,3-dihydrochromen-4-one, also called (+) trans (2R,3R)- dihydroquercetin]
	Chemical formula: $C_{15}H_{12}O_7$
	Molecular mass: 304,25 Da
	CAS No: 480-18-2
	Specifications:
	Physical parameter
	Moisture: ≤ 10 %Compound analysis
	Taxifolin (m/m): $\geq$ 90,0 % of the dry weight

Authorised Novel Food		Specifications
	Heavy Metals, Pesticide	
	Lead: $\leq 0.5 \text{ mg/kg}$	
	Arsenic: ≤ 0,02 mg/kg	
	Cadmium: ≤ 0,5 mg/kg	
	Mercury: ≤ 0,1 mg/kg	
	Dichlorodiphenyltrichloroethan	e (DDT): $\leq 0.05 \text{ mg/kg}$
	Residual solvents	
	Ethanol: < 5 000 mg/kg	
	Microbiological criteria	
	Total Plate Count (TPC): $\leq 10^4$	<sup>4</sup> CFU/g
	Enterobacteria: ≤ 100/g	
	Yeast and Mould: ≤ 100 CFU/g	g
	Escherichia coli: Absence/1 g	
	Salmonella: Absence/10 g	
	Staphylococcus aureus: Absence	ce/1 g
	Pseudomonas: Absence/1g	
	= = =	f the Taxifolin-rich extract (as per dry substance)
	Extract component	Content, usual observed range (%)
	Taxifolin	90 - 93
	Aromadendrin	2,5 - 3,5
	Eriodictyol	0,1-0,3
	Quercetin	0,3-0,5
	Naringenin	0.2 - 0.3
	Kaempferol	0,01-0,1
	Pinocembrin	0.05 - 0.12
	Unidentified flavonoids	1 – 3
	Water(*)	1,5
	(*) Taxifolin in its hydrated form	and during the drying process is a crystal. This results on the inclusion of water of crystallisation in a quantity of 1,5 %.

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#### Trehalose

Authorised Novel Food

### **Description/Definition:**

A non-reducing disaccharide that consists of two glucose moieties linkes by an  $\alpha$ -1,1-glucosidic bond. It is obtained from liquefied starch or from sucrose by a multistep enzymatic process. The commercial product is the dihydrate. Virtually odourless, white or almost white crystals with a sweet taste

Specifications

Synonyms: α,α-trehalose

Chemical name: α-D-glucopyranosyl-α-D-glucopyranoside, dihydrate

CAS No.: 6138-23-4 (dihydrate)

Chemical formula: C<sub>12</sub>H<sub>22</sub>O<sub>11</sub> · 2H<sub>2</sub>O (dihydrate)

Formula weight: 378,33 (dihydrate) Assay:  $\geq$  98 % on the dry basis

Determine using an atomic absorption technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on the principles of the method described in FNP 5 (1), 'Instrumental methods'

### Method of assay:

Principle: trehalose is identified by liquid chromatography and quantified by comparison to a reference standard containing standard trehalose

Preparation of sample solution: weigh accurately about 3 g of dry sample into a 100 ml volumetric flask and add about 80 ml of purified, deionised water. Bring sample to complete dissolution and dilute to mark with purified deionised water. Filter through a 0,45 micron filter

Preparation of standard solution: dissolve accurately weighed quantities of dry standard reference trehalose in water to obtain a solution having known concentration of about 30 mg of trehalose per ml.

Apparatus: liquid chromatography equipped with a refractive index detector and integrating recorder

Conditions:

Column: Shodex Ionpack KS-801 (Showa Denko Co.) or equivalent

— length: 300 mm — diameter: 10 mm — temperature: 50 °C Mobile phase: water flow rate: 0,4 ml/min Injection volume: 8 µl

Procedure: inject separately equal volumes of the sample solution and the standard solution into the chromatograph.

Record the chromatograms and measure the size of response of the trehalose peak

Calculate the quantity, in mg, of trehalose in 1 ml of the sample solution by the following formula:

Authorised Novel Food	Specifications
	% trehalose = $100 \times (R_U/R_S) (W_S/W_U)$
	where
	$R_S$ = peak area of trehalose in the standard preparation
	$R_U$ = peak area of trehalose in the sample preparation
	$W_S$ = weight in mg of trehalose in the standard preparation
	$W_U$ = weight of dry sample in mg
	Characteristics:
	Identification:
	Solubility: Freely soluble in water, very slightly soluble in ethanol
	Specific rotation: $\left[\alpha\right]_{D}^{20} = +179^{\circ}$ (5 % aqueous solution, dihydrate), $+199^{\circ}$ (5 % aqueous solution, anhydrous substance)
	Melting point: 97 °C (dihydrate)
	Purity:
	Loss on drying: ≤ 1,5 % (60 °C, 5h)
	Total ash: $\leq 0.05 \%$
	Heavy metals:
	Lead: ≤ 1,0 mg/kg
UV treated mushrooms (Agaricus	Description/Definition:
bisporus)	Commercially grown Agaricus bisporus to which UV light treatment is applied to harvested mushrooms.
	UV radiation: a process of radiation in ultraviolet light within the wavelength of 200-800 nm.
	Vitamin D <sub>2</sub> :
	Chemical name: (3β,5Z,7E,22E)-9,10-secoergosta-5,7,10(19),22-tetraen-3-ol
	Synonym: Ergocalciferol
	CAS No: 50-14-6
	Molecular weight: 396,65 g/mol
	Contents:
	Vitamin D <sub>2</sub> in the final product: 5-10 μg/100 g fresh weight at the expiration of shelf life

Authorised Novel Food	Specifications
UV-treated baker's yeast (Sac-	Description/Definition:
charomyces cerevisiae)	Baker's yeast ( <i>Saccharomyces cerevisiae</i> ) is treated with ultraviolet light to induce the conversion of ergosterol to vitamin D <sub>2</sub> (ergocalciferol). Vitamin D content in the yeast concentrate varies between 1 800 000-3 500 000 IU vitamin D/100 g (450-875 μg/g).
	Tan-coloured, free-flowing granules
	Vitamin D <sub>2</sub> :
	Chemical name: (5Z,7E,22E)-3S-9,10-secoergosta-5,7,10(19),22-tetraen-3-ol
	Synonym: Ergocalciferol
	CAS No.: 50-14-6
	Molecular weight: 396,65 g/mol
	Microbiological criteria for the yeast concentrate:
	Coliforms: $\leq 10^3/g$
	Escherichia coli: ≤ 10/g
	Salmonella: Absence in 25g
UV-treated bread	Description/Definition:
	UV-treated bread is yeast leavened bread and rolls (without toppings) to which a treatment with ultraviolet radiation is applied after baking in order to conver ergosterol to vitamin D <sub>2</sub> (ergocalciferol).
	UV radiation: A process of radiation in ultraviolet light within the wavelength of 240-315 nm for maximum of 5 seconds with energy input of 10-50 mJ/cm <sup>2</sup>
	Vitamin D <sub>2</sub> :
	Chemical name: (5Z,7E,22E)-3S-9,10-secoergosta-5,7,10(19),22-tetraen-3-ol
	Synonym: Ergocalciferol
	CAS No: 50-14-6
	Molecular weight: 396,65 g/mol
	Contents:
	Vitamin D <sub>2</sub> (ergocalciferol) in the final product: 0,75-3 μg/100 g( <sup>1</sup> )
	Yeast in dough: 1-5 g/100 g ( <sup>2</sup> )
	(¹) EN 12821, 2009, European Standard.
	( <sup>2</sup> ) Recipe calculation.

isation. The treatment of the pasteurised milk with UV radiation results in an increase in the vitamin D <sub>3</sub> (cholecalciferol) concentrations by conversion of 7-dehydrocholesterol to vitamin D <sub>3</sub> .  UV radiation: A process of radiation in ultraviolet light within the wavelength of 200-310 nm with energy input of 1 045 J/l.  Vitamin D <sub>3</sub> :  Chemical name: (18,32)-3-[(2E)-2-[(1R,3aS,7aR)-7a-methyl-1-[(2R)-6-methylheptan-2-yl]-2,3,3a,5,6,7-hexahydro-1H-inden-4-ylidene]-4-methyl-idenecylohexan-1-ol Synonym: Cholecalciferol CAS No: 67-97-0 Molecular weight: 384,6377 g/mol Contents:  Vitamin D <sub>3</sub> in the final product: Whole milk(¹)0,5-3,2 µg/100 g(²) Semi-skimmed milk(1): 0,1-1,5 µg/100 g(²) (¹) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ 1. 347, 20.12.2013, p. 671)  (²) HPLC  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (ac-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.	Authorised Novel Food	Specifications
UV-treated milk is cow's milk (whole and semi-skimmed) to which a treatment with ultraviolet (UV) radiation via turbulent flow is applied after pasteurisation. The treatment of the pasteurisation in ultraviolet light with UV radiation results in an increase in the vitamin D <sub>2</sub> (cholecale/ferol) concentrations by conversion of 7: dehydrocholesterol to vitamin D <sub>3</sub> .  UV radiation: A process of radiation in ultraviolet light within the wavelength of 200-310 nm with energy input of 1 045 J/l.  Vitamin D <sub>3</sub> : Chemical name: (18,372)-3-[(2F)-2-[(1R,3aS,7aR)-7a-methyl-1-[(2R)-6-methylheptan-2-yl]-2,3,3a,5,6,7-hexahydro-1H-inden-4-ylidene]-4-methyl-idenecyclohexan-1-ol Synonym: Cholecalciferol CAS No: 67-97-0 Molecular weight: 384,6377 g/mol Contents: Vitamin D <sub>3</sub> in the final product: Whole milk(')0,5-3,2 µg/100 g(²) Semi-skimmed milk(1): 0,1-1,5 µg/100 g(²) (²) As defined by Regulation (EL) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922772, (EEC) No 23479, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20,12/2013; p. 671) (²) HPLC  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (z-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone-d (MK-4)(n = 3) being C <sub>31</sub> H <sub>60</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>60</sub> O <sub>2</sub> .  Chemical Name: (all-E2-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione CAS Number: 2124-57-4		
isation. The treatment of the pasteurised milk with UV radiation results in an increase in the vitamin D <sub>3</sub> (cholecalciferol) concentrations by conversion of 7-dehydrocholesterol to vitamin D <sub>3</sub> .  UV radiation: A process of radiation in ultraviolet light within the wavelength of 200-310 nm with energy input of 1 045 J/l.  Vitamin D <sub>3</sub> :  Chemical name: (1S <sub>3</sub> Z)-3-[(2E)-2-[(1R <sub>3</sub> aS <sub>3</sub> 7aR)-7a-methyl-1-[(2R)-6-methylheptan-2-yl]-2,3,3a,5,6,7-hexahydro-1H-inden-4-ylidene]ethylidene]-4-methyl-ideneyclohexan-1-ol Synonym: Cholecalciferol CAS No: 67-97-0 Molecular weight: 384,6377 g/mol Contents:  Vitamin D <sub>3</sub> in the final product: Whole milk(*)0.5-3.2 µg/100 g(*) Semi-skimmed milk(*)0.5-3.2 µg/100 g(*) (*) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72. (EEC) No 234/79. (EC) No 1037/2001 and (EC) No 1234/2007 (O) L 347, 20.12.2013, p. 671) (*) HPLC  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (menaquinone) series with menaquinone), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinone) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>66</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>36</sub> O <sub>2</sub> are menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>36</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4	UV-treated milk	
Vitamin D <sub>3</sub> :  Chemical name: (1S,3Z)-3-[(2E)-2-[(1R,3aS,7aR)-7a-methyl-1-[(2R)-6-methylheptan-2-yl]-2,3,3a,5,6,7-hexahydro-1H-inden-4-ylidene]-4-methyl-idenecyclohexan-1-ol Synonym: Cholecalciferol CAS No: 67-97-0 Molecular weight: 384,6377 g/mol Contents:  Vitamin D <sub>3</sub> in the final product: Whole milk(¹) 0,5-3,2 µg/100 g(²) Semi-skimmed milk(1): 0,1-1,5 µg/100 g(²) (¹) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671) (²) HPLC  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process. Vitamin K <sub>2</sub> (menaquinone)  Vitamin K <sub>2</sub> (menaquinone) series with menaquinone of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,71,11,5,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione CAS Number: 2124-57-4		UV-treated milk is cow's milk (whole and semi-skimmed) to which a treatment with ultraviolet (UV) radiation via turbulent flow is applied after pasteurisation. The treatment of the pasteurised milk with UV radiation results in an increase in the vitamin D <sub>3</sub> (cholecalciferol) concentrations by conversion of 7-dehydrocholesterol to vitamin D <sub>3</sub> .
Chemical name: (1S,3Z)-3-[(2E)-2-[(1R,3aS,7aR)-7a-methyl-1-[(2R)-6-methylheptan-2-yl]-2,3,3a,5,6,7-hexahydro-1H-inden-4-ylidene]-4-methyl-idenecyclohexan-1-ol Synonym: Cholecalciferol CAS No: 67-97-0 Molecular weight: 384,6377 g/mol Contents:  Vitamin D <sub>3</sub> in the final product: Whole milk( <sup>1</sup> )0,5-3,2 µg/100 g( <sup>2</sup> ) Semi-skimmed milk(1): 0,1-1,5 µg/100 g( <sup>2</sup> ) ( <sup>3</sup> ) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671) ( <sup>3</sup> ) HPLC  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (c-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		UV radiation: A process of radiation in ultraviolet light within the wavelength of 200-310 nm with energy input of 1 045 J/l.
idenecyclohexan-1-ol Synonym: Cholecalciferol CAS No: 67-97-0 Molecular weight: 384,6377 g/mol Contents: Vitamin D <sub>3</sub> in the final product: Whole milk(1): 0,5-3,2 µg/100 g( <sup>2</sup> ) Semi-skimmed milk(1): 0,1-1,5 µg/100 g( <sup>2</sup> ) ( <sup>1</sup> ) As defined by Regulation (EID) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671) ( <sup>2</sup> ) HPLC  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process. Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6. Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>43</sub> O <sub>2</sub> . Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione CAS Number: 2124-57-4		Vitamin D <sub>3</sub> :
CAS No: 67-97-0  Molecular weight: 384,6377 g/mol  Contents:  Vitamin D <sub>3</sub> in the final product:  Whole milk(¹)0,5-3,2 µg/100 g(²)  Semi-skimmed milk(1): 0,1-1,5 µg/100 g(²)  (¹) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671)  (²) HPLC  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>100</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		Chemical name: (1S,3Z)-3-[(2E)-2-[(1R,3aS,7aR)-7a-methyl-1-[(2R)-6-methylheptan-2-yl]-2,3,3a,5,6,7-hexahydro-1H-inden-4-ylidene]-4-methyl-idenecyclohexan-1-ol
Molecular weight: 384,6377 g/mol  Contents:  Vitamin D <sub>3</sub> in the final product:  Whole milk(¹)0,5-3,2 μg/100 g(²)  Semi-skimmed milk(1): 0,1-1,5 μg/100 g(²)  (¹) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671)  (²) HPLC  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>40</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>46</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione CAS Number: 2124-57-4		Synonym: Cholecalciferol
Contents:  Vitamin D <sub>3</sub> in the final product:  Whole milk(¹)0,5-3,2 μg/100 g(²)  Semi-skimmed milk(1): 0,1-1,5 μg/100 g(²)  (¹) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671)  (²) HPLC  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		CAS No: 67-97-0
Vitamin D <sub>3</sub> in the final product:  Whole milk( <sup>1</sup> )0,5-3,2 µg/100 g( <sup>2</sup> )  Semi-skimmed milk(1): 0,1-1,5 µg/100 g( <sup>2</sup> )  ( <sup>1</sup> ) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671)  ( <sup>2</sup> ) HPLC  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		Molecular weight: 384,6377 g/mol
Whole milk(¹)0,5-3,2 μg/100 g(²)  Semi-skimmed milk(1): 0,1-1,5 μg/100 g(²)  (¹) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671)  (²) HPLC  Vitamin K₂ (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K₂ (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K₂ (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C₄6H₀4O₂, menaquinone-6 (MK-6)(n = 5) being C₄1H₃6O₂ and menaquinone-4 (MK-4)(n = 3) being C₃1H₄0O₂.  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		Contents:
Semi-skimmed milk(1): 0,1–1,5 μg/100 g(²)  (¹) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671)  (²) HPLC  This novel food is produced by a synthetic or microbiological process.  Vitamin K₂ (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K₂ (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C₄6H₆4O₂, menaquinone-6 (MK-6)(n = 5) being C₄1H₆6O₂ and menaquinone-4 (MK-4)(n = 3) being C₃1H₆6O₂.  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		Vitamin D <sub>3</sub> in the final product:
(¹) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671) (²) HPLC  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		Whole $milk(^{1})0,5-3,2 \mu g/100 g(^{2})$
Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (menaquinone)  Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		Semi-skimmed milk(1): $0,1-1,5 \mu g/100 g(^2)$
Vitamin K <sub>2</sub> (menaquinone)  This novel food is produced by a synthetic or microbiological process.  Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		(1) As defined by Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671)
Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		(²) HPLC
Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4		
number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.  Vitamin K <sub>2</sub> (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being C <sub>46</sub> H <sub>64</sub> O <sub>2</sub> , menaquinone-6 (MK-6)(n = 5) being C <sub>41</sub> H <sub>56</sub> O <sub>2</sub> and menaquinone-4 (MK-4)(n = 3) being C <sub>31</sub> H <sub>40</sub> O <sub>2</sub> .  Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione  CAS Number: 2124-57-4	Vitamin K <sub>2</sub> (menaquinone)	This novel food is produced by a synthetic or microbiological process.
$(MK-4)(n = 3)$ being $C_{31}H_{40}O_2$ . Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione CAS Number: 2124-57-4		Vitamin K <sub>2</sub> (2-methyl-3-all-trans-polyprenyl-1,4-naphthoquinones), or the menaquinone series, is a group of prenylated naphthoquinone derivatives. The number of isoprene residues, where 1 isoprene unit consists of 5 carbons comprising the side chain, is used to characterise the menaquinone homologues containing primarily MK-7 and to a smaller extent MK-6.
CAS Number: 2124-57-4		Vitamin $K_2$ (menaquinones) series with menaquinone-7 (MK-7)(n = 6) being $C_{46}H_{64}O_2$ , menaquinone-6 (MK-6)(n = 5) being $C_{41}H_{56}O_2$ and menaquinone-4 (MK-4)(n = 3) being $C_{31}H_{40}O_2$ .
		Chemical Name: (all-E)-2-(3,7,11,15,19,23,27-Heptamethyl-2,6,10,14,18,22,26-octacosaheptaenyl)-3-methyl-1,4-naphtalenedione
Molecular formula: C <sub>46</sub> H <sub>64</sub> O <sub>2</sub>		CAS Number: 2124-57-4
		Molecular formula: C <sub>46</sub> H <sub>64</sub> O <sub>2</sub>

Authorised Novel Food

	Molecular weight: 649 g/mol
	2-methyl-1,4-naphthoquinone (menadione moiety)
	Specification of synthetic Vitamin K <sub>2</sub> (menaquinone-7)
	Appearance: Yellow powder
	Purity: Max 6,0 % cis-isomer, max 2,0 % other impurities
	Content: 97-102 % Menaquinone-7 (including at least 92 % all-trans Menaquinone-7)
	Specifications of microbiologically produced Vitamin $K_2$ (menaquinone-7)
	Source: Bacillus subtilis spp. natto and Bacillus licheniformis
	Appearance: Yellow powder or oil suspension
Wheat bran extract	Description/Definition:
	White crystalline powder obtained by enzymatic extraction from <i>Triticum aestivum</i> L. bran, rich in arabinoxylan oligosaccharides
	Dry matter: Min. 94 %
	Arabinoxylan oligosaccharides: Min 70 % of dry matter
	Average degree of polymerisation of arabinoxylan oligosaccharides: 3-8
	Ferulic acid (bound to arabinoxylan oligosaccharides): 1-3 % of dry matter
	Total poly/oligosaccharides: Min 90 %
	Protein: Max 2 % of dry matter
	Ash: Max 2 % of dry matter

Specifications

Authorised Novel Food	Specifications
	Microbiological parameters:
	Mesophilic bacteria – total count: Max 10 000/g
	Yeasts: Max 100/g
	Fungi: Max 100/g
	Salmonella: Absence in 25g
	Bacillus cereus: Max 1000/g
	Clostridium perfringens: Max 1000/g

# **▼**<u>M19</u>

## Xylo-oligosaccharides

## **Description:**

The novel food is a mixture of xylo-oligosaccharides (XOS) which are obtained from corncobs (Zea mays subsp. mays) via hydrolysis by a xylanase from Trichoderma reesei followed by a purification process.

## Characteristics/Composition

Parameter	Powder form 1	Powder form 2	Syrup form
Moisture (%)	≤ 5,0	≤ 5,0	70-75
Protein (g/100 g)		< 0,2	
Ash (%)	≤ 0,3		
рН		3,5-5,0	
Total carbohydrate content (g/100 g)	≥ 97	≥ 95	≥ 70
XOS content (dry basis) (g/100 g)	≥ 95	≥ 70	≥ 70
Other carbohydrates (g/100 g) (a)	2,5-7,5	2-16	1,5-31,5
Monosaccharides total (g/100 g)	0-4,5	0-13	0-29
Glucose (g/100 g)	0-2	0-5	0-4
Arabinose (g/100 g)	0-1,5	0-3	0-10
Xylose (g/100 g)	0-1,0	0-5	0-15
Disaccharides total (g/100 g)	27,5-48	25-43	26,5-42,5

Authorised Novel Food		Specification	ns	
	Xylobiose (XOS DP2) (g/100 g)	25-45	23-40	25-40
	Cellobiose (g/100 g)	2,5-3	2-3	1,5-2,5
	Oligosaccharides total (g/100 g)	41-77	36-72	32-71
	xylotriose (XOS DP3) (g/100 g)	27-35	18-30	18-30
	xylotetraose (XOS DP4) (g/100 g)	10-20	10-20	8-20
	xylopentaose (XOS DP5) (g/100 g)	3-10	5-10	3-10
	xylohexaose (XOS DP6) (g/100 g)	1-5	1-5	1-5
	Xyloheptaose (XOS DP7) (g/100 g)	0-7	2-7	2-6
	Maltodextrin (g/100 g) ( <sup>b</sup> )	0	20-25	0
	Copper (mg/kg)		< 5,0	
	Lead (mg/kg)		< 0,5	
	Arsenic (mg/kg)		< 0,3	
	Salmonella (CFU (°)/25 g)		Negative	
	E, coli (MPN ( <sup>d</sup> )/100 g)		Negative	
	Yeast (CFU/g)	< 10		
	Mould (CFU/g)		< 10	
	DP: Degree of polymerization			
	(a) Other carbohydrates include monosaccharides (glue (b) Maltodextrin content is calculated according to the (c) CFU: Colony Forming Units. (d) MPN: Most Probable Number.	cose, xylose and arabinose) and cellobio e amount added in the process.	ose.	

Authorised Novel Food

Yeast beta-glucans

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# Description/Definition:

Beta-glucans are complex, high molecular mass (100-200 kDa) polysaccharides, found in the cell wall of many yeasts and cereals.

The chemical name for 'yeast beta-glucans' is (1-3),(1-6)-β-D-glucans.

Beta-glucans consist of a backbone of β-1-3-linked glucose residues that are branched by β-1-6-linkages, to which chitin and mannoproteins are linked by β-1-4-bonds.

Specifications

Beta-glucans are isolated from yeast Saccharomyces cerevisiae.

The tertiary structure of the glucan cell wall of *Saccharomyces cerevisiae* consists of chains of β-1,3-linked glucose residues, branched by β-1,6-linkages, forming a backbone to which are linked chitin via β-1,4- bonds, β-1,6-glucans and some mannoproteins.

This novel food is available in three different forms: soluble, insoluble and insoluble in water, but dispersible in many liquid matrices.

### Chemical characteristics yeast (Saccharomyces cerevisiae) beta-glucans:

#### Soluble form:

Total carbohydrates: > 75 %

Beta-glucans (1,3/1,6): > 75 %

Ash: < 4.0 %

Moisture: < 8,0 %

Protein: < 3,5 %

Fat: < 10 %

### Insoluble form:

Total carbohydrates: > 70 %

Beta-glucans (1,3/1,6): > 70 %

Ash: ≤ 12 %

Moisture: < 8,0 %

Protein: < 10 %

Fat: < 20 %

### Insoluble in water, but dispersible in many liquid matrices:

(1,3)-(1,6)- $\beta$ -D-Glucans: > 80 %

Authorised Novel Food	Specifications
	Ash: < 2,0 %
	Moisture: < 6,0 %
	Protein: < 4,0 %
	Total fat: < 3,0 %
	Microbiological data for insoluble in water, but dispersible in many liquid matrices:
	Total plate count: < 1 000 CFU/g
	Enterobacteriaceae: < 100 CFU/g
	Total coliforms: < 10 CFU/g
	Yeast: < 25 CFU/g
	Mould: < 25 CFU/g
	Salmonella: Absence in 25 g
	Escherichia coli: Absence in 1 g
	Bacillus cereus: < 100 CFU/g
	Staphylococcus aureus: Absence in 1 g
	Heavy metals for insoluble in water, but dispersible in many liquid matrices:
	Lead: $< 0.2 \text{ mg/g}$
	Arsenic: < 0,2 mg/g
	Mercury: $< 0.1 \text{ mg/g}$
	Cadmium: < 0,1 mg/g
Zeaxanthin	Description/Definition:
	Zeaxanthin is a naturally occurring xanthophyll pigment, it is an oxygenated carotenoid.
	The synthetic zeaxanthin is presented either as a spray-dried powder of gelatin or starch base ('beadlets') with added $\alpha$ -tocopherol and ascorbyl palmitate or as a corn oil suspension with added $\alpha$ -tocopherol. Synthetic zeaxanthin is produced by a multi-step chemical synthesis from smaller molecules.
	Orange-red crystalline powder with little or no odour.
	Chemical formula: C <sub>40</sub> H <sub>56</sub> O <sub>2</sub>
	CAS No: 144-68-3

Authorised Novel Food	Specifications
	Molecular weight: 568,9 daltons
	Physical-chemical properties:
	Loss on drying: < 0,2 %
	All-trans zeaxanthin: > 96 %
	Cis-zeaxanthin: < 2,0 %
	Other carotenoids: < 1,5 %
	Triphenylphosphine oxid (CAS No 791-28-6): < 50 mg/kg
Zinc L-pidolate	Description/Definition:
	Zinc L-pidolate is a white to off-white powder, with characteristic odour.
	International non-proprietary name (INN): L-pyroglutamic acid, Zinc salt
	Synonyms: Zinc 5-oxoproline, Zinc pyroglutamate, Zinc pyrrolidone carboxylate, Zinc PCA, L-Zinc pidolate
	CAS No.: 15454-75-8
	Molecular formula: (C <sub>5</sub> H <sub>6</sub> NO <sub>3</sub> ) <sub>2</sub> Zn
	Relative anhydrous molecular mass: 321,4
	Appearance: White to slightly white powder
	Purity:
	Zinc L-pidolate (purity): ≥ 98 %
	pH (10 % aqueous sol.): 5,0-6,0
	Specific rotation: 19,6°- 22,8°
	Water: ≤ 10,0 %
	Glutamic acid: < 2,0 %
	Heavy metals:
	Lead: $\leq 3.0$ ppm
	Arsenic: ≤ 2,0 ppm
	Cadmium: ≤ 1,0 ppm

Authorised Novel Food	Specifications
	Mercury: ≤ 0,1 ppm
	Microbiological criteria:
	Total viable mesophilic count: ≤ 1 000 CFU/g
	Yeasts and moulds: $\leq 100 \text{ CFU/g}$
	Pathogen: Absence
(1) Commission Regulation (EII) No 231/2	2012 of 9 March 2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council

<sup>(1)</sup> Commission Regulation (EU) No 231/2012 of 9 March 2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council (OJ L 83, 22.3.2012, p. 1).

- (5) The different values for these three parameters are due to the different methods used.
- (6) GAE: Gallic Acid Equivalents.
- (7) CFU: Colony Forming Units. ◀

<sup>(2)</sup> Commission Implementing Regulation (EU) 2015/175 of 5 February 2015 laying down special conditions applicable to the import of guar gum originating in or consigned from India due to contamination risks by pentachlorophenol and dioxins (OJ L 30, 6.2.2015, p. 10).

<sup>▶</sup> M15 (³) OSC-DMAC (4-dimethylaminocinnamaldehyde) method (Ocean Spray Cranberries, Inc) Martin MA, Ramos S, Mateos R, Marais JPJ, Bravo-Clemente, L, Khoo C and Goya L. Food Res Intl 2015 71: 68-82.

Modified from Cunningham DG, Vannozzi S, O'Shea E, Turk R (2002) In: Ho C-T, Zheng QY (eds) Quality Management of Nutraceuticals ACS Symposium series 803, Washington DC. Quantitation of PACs by DMAC Color Reaction pp 151-166.

<sup>(4)</sup> BL-DMAC 4-dimethylaminocinnamaldehyde) method (Brunswick Lab) Multi-laboratory validation of a standard method for quantifying proanthocyanidins in cranberry powders. Prior RL, Fan E, Ji H, Howell A, Nio C, Payne MJ, Reed J. J Sci Food Agric. 2010 Jul;90(9):1473-8.