This text is meant purely as a documentation tool and has no legal effect. The Union's institutions do not assume any liability for its contents. The authentic versions of the relevant acts, including their preambles, are those published in the Official Journal of the European Union and available in EUR-Lex. Those official texts are directly accessible through the links embedded in this document

# $ightharpoonup \underline{B}$ 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
► <u>M26</u>	Commission Implementing Regulation (EU) 2019/387 of 11 March 2019	L 70	17	12.3.2019
► <u>M27</u>	Commission Implementing Regulation (EU) 2019/388 of 11 March 2019	L 70	21	12.3.2019
► <u>M28</u>	Commission Implementing Regulation (EU) 2019/456 of 20 March 2019	L 79	13	21.3.2019
► <u>M29</u>	Commission Implementing Regulation (EU) 2019/506 of 26 March 2019	L 85	11	27.3.2019
►M30	Commission Implementing Regulation (EU) 2019/760 of 13 May 2019	L 125	13	14.5.2019
►M31	Commission Implementing Regulation (EU) 2019/1272 of 29 July 2019	L 201	3	30.7.2019
► <u>M32</u>	Commission Implementing Regulation (EU) 2019/1294 of 1 August 2019	L 204	16	2.8.2019
► <u>M33</u>	Commission Implementing Regulation (EU) 2019/1314 of 2 August 2019	L 205	4	5.8.2019
► <u>M34</u>	Commission Implementing Regulation (EU) 2019/1686 of 8 October 2019	L 258	13	9.10.2019
► <u>M35</u>	Commission Implementing Regulation (EU) 2019/1976 of 25 November 2019	L 308	40	29.11.2019
► <u>M36</u>	Commission implementing Regulation (EU) 2019/1979 of 26 November 2019	L 308	62	29.11.2019
► <u>M37</u>	Commission Implementing Regulation (EU) 2019/2165 of 17 December 2019	L 328	81	18.12.2019
► <u>M38</u>	Commission Implementing Regulation (EU) 2020/16 of 10 January 2020	L 7	6	13.1.2020
► <u>M39</u>	Commission Implementing Regulation (EU) 2020/24 of 13 January 2020	L 8	12	14.1.2020
► <u>M40</u>	Commission Implementing Regulation (EU) 2020/206 of 14 February 2020	L 43	66	17.2.2020

## **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 nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀	
N-Acetyl-D-neur-aminic acid	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs	on the labelling of the foodstuffs		
	Infant and follow-on formulae as defined by Regulation (EU) No 609/2013 (1)	0,05 g/L of reconstituted formula	containing it shall be 'N-acetyl-D-neuraminic acid'  Food supplements containing N-acetyl-D-neuraminic acid shall bear a statement that the food supplement			
	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				
	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)				
1	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 nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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>M29</u> Data Protection ◀
Ajuga reptans extract from cell cultures	Specified food category	Maximum levels			
cultures	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	Directive			
	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			

1112						
	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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 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/ 100 g			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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 no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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	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		
Euphausia superba	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/			
	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>M29</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>M29</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		
	mgunu spinosu	As seasonings	Not specified	containing it shall be 'Argan oil' and if used as seasoning 'Vegetable		
		Food Supplements as defined in Directive 2002/46/EC	In line with normal food use of vegetable oils	oil only for seasoning' shall be mentioned on the label		
	Astaxanthin-rich oleoresin from	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Haematococcus pluvialis algae	Food Supplements as defined in Directive 2002/46/EC	40-80 mg/day of oleoresin, resulting in ≤ 8 mg astaxanthin per day	containing it shall be 'Astaxanthin'		
	Basil seeds (Ocimum basilicum)	Specified food category	Maximum levels			
	ousuicum;	Fruit juice and fruit/vegetable blend beverages	3 g/200 ml for addition of whole basil seeds ( <i>Ocimum basilicum</i> )			
▼ <u>M32</u>						
	Betaine	Specified food category	Maximum levels ( <sup>7</sup> )	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'betaine'.  The labelling of foods containing betaine shall bear a statement that the foods should not be used if food supplements containing betaine are consumed the same day.		Authorised on 22 August 2019. This inclusion is
		Drink powders, isotonic and energy drinks intended for sportsmen	60 mg/100 g		based on proprietary scientific evidence and scientific data protected in	
		Protein and cereal bars intended for sportsmen	500 mg/100 g		accordance with Article 26 of Regulation (EU) 2015/2283.	
		Meal replacements intended for sportsmen	20 mg/100 g	betaine are consumed the same day.		Applicant: DuPont Nutrition Biosciences ApS, Lange-
		Total diet replacement for weight control as defined under Regulation (EU) No 609/2013	500 mg/100 g (bar) 136 mg/100 g (soup) 188 mg/100 g (porridge) 60 mg/100 g (beverages)			brogade 1 Copenhagen K, DK-1411, Denmark. During the period of data protection, the novel food betaine is authorised for placing on the market within the Union
		Foods for Special Medical Purposes as defined under Regulation (EU) No 609/2013 for adults	400 mg/day			only by DuPont Nutrition Biosciences ApS unless a subsequent applicant obtains

**▼**<u>M32</u>

	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
						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 DuPont Nutrition Biosciences ApS, End date of the data protection: 22 August 2024.
<b>▼</b> <u>M9</u>						
	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		
		Food Supplements as defined in Directive 2002/46/EC	4,5 g/day	black bean (Soya) extract'' or 'Fermented Soya extract'		
	Bovine lactoferrin	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lactoferrin		
		Infant formula and follow-on formula as defined in Regulation (EU) No 609/2013 (ready to drink)	100 mg/100 ml	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>M29</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			

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
Authorised novel food  Bovine milk basic whey protein isolate	Specified food category  Infant formulae as defined in Regulation (EU) No 609/2013 Follow-on formulae as defined in Regulation (EU) No 609/2013 Total diet replacement foods for weight control as defined by Regulation (EU)	Maximum levels	Additional specific labelling requirements  The designation of the novel food 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 infants/children/	Other requirements	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: Armor Protéines S.A.S., 19 bis, rue de la Libération 35460
	No 609/2013  Foods for special medical purposes as defined in Regulation (EU) No 609/2013  Food Supplements as defined in Directive 2002/46/EC	30 mg/100 g (powder formula for infants during the first months of life until the introduction of appropriate complementary feeding)  3,9 mg/100 mL (reconstituted formula for infants during the first months of life until the introduction of appropriate complementary feeding)  30 mg/100 g (powder formula for infants when appropriate complementary feeding is introduced)  4,2 mg/100 mL (reconstituted formula for infants when appropriate complementary feeding is introduced)  58 mg/day for young children  380 mg/day for children and adolescents from 3 to 18 years of age  610 mg/day for young children  250 mg/day for children and adolescents from 3 to 18 years of age  610 mg/day for children and adolescents from 3 to 18 years of age	adolescents under the age of one/ three/eighteen (*) years' (*) Depending on the age group the food supplement is intended for.		Saint-Brice-en- Coglès, France. During the period of data protection the novel food bovine milk basic whey protein isolate is authorised for placing on the market within the Union only by Armor Protéines S.A.S. 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 Armor Protéines S.A.S. End date of the data protection: 20 November 2023.

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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>M29</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- ethylene glycol)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	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 ether-maleic anhydride copolymer)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	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>	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>M29</u> Data Protection ◀
<u>M39</u>						
	Chia seeds (Salvia hispanica)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	тэринси)	Bread products	5 % (whole or ground chia seeds)	containing it shall be 'Chia seeds (Salvia hispanica)'		
		Baked products	10 % whole chia seeds			
		Breakfast cereals	10 % whole chia seeds			
		Sterilised ready to eat meals based on cereal grains, pseudocereals grains and/or pulses	5 % whole chia seeds			
		Fruit, nut and seed mixes				
		Pre-packaged Chia seed as such				
		Confectionery (including chocolate and chocolate products), excluding chewing gums				
		Dairy products (including yoghurt) and analogues				
		Edible ices				
		Fruit and vegetables products (including fruit spreads, compotes with/without cereals, fruit-preparations to underlay or to be mixed with dairy products, fruit desserts, mixed fruits with coconut milk for a twin pot)				
		Non-alcoholic beverages (including fruit juice and fruit/vegetable blend beverages)				
		Puddings that do not require heat treatment at or above 120 °C in their manufacture, processing or preparation				

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
Chitin-glucan from	Specified food category	Maximum levels	The designation of the novel food		
Aspergillus niger	Food Supplements as defined in Directive 2002/46/EC	5 g/day	on the labelling of the foodstuffs containing it shall be 'Chitin-glucan from Aspergillus niger'		
Chitin-glucan complex from	Specified food category	Maximum levels	The designation of the novel food		
Fomes fomentarius	Food Supplements as defined in Directive 2002/46/EC	5 g/day	on the labelling of the foodstuffs containing it shall be 'Chitin-glucan from Fomes fomentarius'		
Chitosan extract from fungi (Agaricus bisporus; Aspergillus niger)	Specified food category	Maximum levels	The designation of the novel food		
	Food Supplements as defined in Directive 2002/46/EC	In line with normal use in food supplements of chitosan from crustaceans			
Chondroitin sulphate	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Chondroitin sulphate derived from microbial fermentation and sulphation'		
	Food supplements as defined in Directive 2002/46/EC for adult population, excluding pregnant and lactating women	1 200 mg/day			
Chromium	Specified food category	Maximum levels of total chromium	The designation of the novel food		
Picolinate	Foods covered by Regulation (EU) No 609/2013	250 μg/day	on the labelling of the foodstuffs containing it shall be 'Chromium Picolinate'		
	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		
randans nerb	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	1. The designation of the novel food		
	Food Supplements as defined in Directive 2002/46/EC	500 mg/day	on the labelling of the foodstuffs containing it shall be 'Citicoline'  2. The labelling of foods containing		
	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	citicoline shall bear a statement 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>M29</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 × 10 <sup>8</sup> CFU/day	containing it shall be 'Clostridium butyricum MIYAIRI 588 (CBM 588)' or 'Clostridium butyricum (CBM 588)'		
D-ribose	Specified food category	Maximum levels	The designation of the novel food		Authorised on 16 April
	Cereal bars	0,20 g/100 g	on the labelling of the foodstuffs containing it shall be 'D-ribose'.		2019. This inclusion based on proprieta
	Fine bakery wares	0,31 g/100 g	The labelling of foods containing D-ribose shall bear a statement that		scientific evidence a scientific data protected
	Chocolate confectionery (excluding chocolate bars)	0,17 g/100 g	the foods should not be used if food supplements containing D-ribose are		accordance with Article 26 of Regulation (EU) 2015/2283.  Applicant: Bioenergy Life Science, Inc., 13840 Johnson St. NE, Minneapolis, Minnesota, 55304, USA. During the period of data protection, the novel food D-ribose is authorised for placing on the market within the Union only by Bioenergy Life Science, Inc. unless a subsequent applicant obtains authorisation for the
	Milk-based drinks (excluding malts and shakes)	0,08 g/100 g	consumed the same day.		
	Drinks intended to meet the expenditure of intense muscular effort especially for sportsmen, isotonic and energy drinks	0,80 g/100 g			
	Bars intended to meet the expenditure of intense muscular effort especially for sportsmen	3,3 g/100 g		for with Biod unle obta	
	Meal replacement for weight control (as drinks)'	0,13 g/100 g			
	Meal replacement for weight control (as bars)	3,30 g/100 g			novel food without refere to the proprietary scient
	Confectionery	0,20 g/100 g			evidence or scientific data protected in accordance with
	Tea and infusions (in powder form to be reconstituted)	0,23 g/100 g			Article 26 of Regulation (I 2015/2283 or with agreement of Bioenergy I Science, Inc.
					End date of the oprotection: 16 April 2024 years).

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
Extract of defatted cocoa powder	Specified food category	Maximum levels	Consumers shall be instructed not to consume more than 600 mg polyphenols corresponding to 1,1 g of		
	Nutrition bars	1 g/day and 300 mg polyphenols corresponding to not more than 550 mg of extract of defatted	extract of defatted cocoa powder per day		
	Milk based beverages	cocoa powder in one portion of food (or food supplement)			
	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 cocoa flavanols per day		
	Foods including food supplements as defined in Directive 2002/46/EC	730 mg per serving and around 1,2 g/day			
Coriander seed oil from <i>Coriandrum</i> sativum	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Coriander		
	Food Supplements as defined in Directive 2002/46/EC	600 mg/day	seed oil'		

<u> 1V19</u>						
	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
<u>M15</u>						
	Cranberry extract powder	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		Authorised on 20 Novembe 2018. This inclusion is base
	Food Supplements as define 2002/46/EC for the adult pop	Food Supplements as defined in Directive 2002/46/EC for the adult population	350 mg/day	containing it shall be 'cranberry extract powder'		on proprietary scientific evidence and scientific data protected in accordance with Article 26 of Regulation (EU 2015/2283.
						Applicant: Ocean Spray Cranberries Inc. One Ocean Spray Drive Lakeville- Middleboro, MA, 02349, USA.
						During the period of data protection the novel food cranberry extract powder, is authorised for placing or the market within the Unior only by Ocean Spray Cranberries Inc. unless a subsequent applicant obtains 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 Ocean Spray Cranberries Inc.
						End date of the data protection: 20 Novembe 2023.

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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 (Digitaria exilis) grains'		
Dextran preparation produced	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
by Leuconostoc mesenteroides	Bakery products	5 %	containing it shall be 'Dextran'		

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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 (DHC)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	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 4.3 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>M29</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>M29</u> Data Protection ◀
						Applicant: Desert Labs, Ltd Kibbutz Yotvata, 88820 Israel.  During the period of data protection the novel food dried aerial parts of <i>Hoodia parviflora</i> 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.
<b>▼</b> <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 <sup>®</sup> Vb'		

V 1V17						
	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
	Echinacea angus- tifolia 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 from the root of <i>Echinacea angustifolia</i>			
▼ <u>M31</u>						
	Echinacea purpurea extract from cell	Specified food category	Maximum levels	The designation of the novel food		
	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>	on the labelling of the foodstuffs containing it shall be 'dried extract of <i>Echinacea purpurea</i> from cell cultures EchiPure-PC <sup>TM</sup> '		
▼ <u>M9</u>						
	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		
		Milk-based products and drinkable yoghurt products delivered in a single dose	250 mg/100 g; 75 mg/100 g for drinks	echium oil'		
		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			

<u> </u>					
Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements Other requirements ► M29 D		► <u>M29</u> Data Protection ◀
118					
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 Noven 2018. This inclusion is be on proprietary scient evidence and scientific protected in accordance Article 26 of Regulation (2015/2283.
					Applicant: Biova, LI 5800 Merle Hay Rd, S 14 PO Box 394 Johns 50131, Iowa USA. Dut the period of data protect the novel food membrane hydrolysate authorised for placing the market within the Ur only by Biova, LLC. unle subsequent applicant obta authorisation for the not food without reference the proprietary scient evidence or scientific oprotected in accordance varicle 26 of Regulation (12015/2283) or with agreement of Biova, LLC.
					End date of the protection: 25 Novem

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
Epigallocatechin gallate as a purified extract from green tea leaves (Camellia sinensis)	Specified food category	Maximum levels	The labelling shall bear a statement that consumers should not consume		
	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 foodstuffs containing it shall be 'Ferric Sodium EDTA'		
	Food supplements as defined in Directive 2002/46/EC	18 mg/day for children			
	2002/46/EC	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		
r	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 ammonium phosphate'		
	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 ▶ <u>M29</u> 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
Surunops sugux	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	Maximum levels of flavonoids from Glycyrrhiza glabra	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Flavonoids flavonoids shall
	Beverages based on milk	120 mg/day	from Glycyrrhiza glabra L.' be presented to the final
	Beverages based on yoghurt		2. The labelling of the foods where the product was added as a novel single portions.
	Beverages based on fruit or vegetables		food ingredient shall bear a statement that:
	Food Supplements as defined in Directive 2002/46/EC	120 mg/day	(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	120 mg/day	children and young adolescents; and  (b) people taking prescription
	Foods for special medical purposes as defined in Regulation (EU) No 609/2013	120 mg/day	drugs should only consume the product under medical supervision;
			(c) a maximum of 120 mg of flavonoids per day should be consumed.
			3. The amount of flavonoids in the final food shall be indicated on the labelling of the food containing it.

▼ <u>M19</u>						
	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
▼ <u>M40</u>	Fruit pulp, pulp juice, concentrated pulp juice from <i>Theobroma cacao</i> L. (Traditional food from a third country)	Not specified	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'cocoa ( <i>Theobroma cacao</i> L.) pulp', 'cocoa ( <i>Theobroma cacao</i> L.) pulp juice' or 'cocoa ( <i>Theobroma cacao</i> L.) concentrated pulp juice' depending on the form used.			
7 <u>M9</u>	Fucoidan extract	Specified food category	Maximum levels	The designation of the novel food		
	from the seaweed 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 from the seaweed	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Fucoidan extract from seaweed Undaria pinnatifida'		
	Undaria pinnatifida Fo	Foods including food supplements as defined in Directive 2002/46/EC for the general population	250 mg/day			
	2'-Fucosyllactose	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
		Unflavoured pasteurised and sterilised (including UHT) milk-based products	1,2 g/l	containing it shall be '2'-fucosyllactose'.		
		Unflavoured fermented milk-based products	1,2 g/l beverages	be used if 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			

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
	Dairy analogues, including beverage whiteners	1,2 g/l beverages	3. The labelling of food		
		12 g/kg for products other than beverages	supplements containing 2'-fuco- syllactose intended for young children shall bear a statement that the supplements should not		
		400 g/kg for whitener	be used if breast milk or other foods with added 2'-fucosyllactose are consumed the same day.		
	Cereal bars	12 g/kg	uay.		
	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>M29</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			
	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			

				,		
	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
▼ <u>M36</u>						
	2'-Fucosyllactose/ Difucosyllactose	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		Authorised on 19.12.2019. This inclusion is based on
	mixture ('2'-FL/ DFL')	Unflavoured pasteurised and unflavoured sterilised (including UHT) milk products	2,0 g/L	containing it shall be '2'-Fucosyllactose/Difucosyllactose mixture'.		proprietary scientific evidence and scientific data protected in accordance with
	(microbial source)	Unflavoured fermented milk-based products	2,0 g/L (beverages)	The labelling of food supplements containing the 2'-Fucosyllactose/ Difucosyllactose mixture shall bear		Article 26 of Regulation (EU) 2015/2283.
			20 g/kg (products other than beverages)	a statement that they should not be used if breast milk or other foods containing added 2'-Fucosyllactose		Applicant: Glycom A/S, Kogle Allé 4, DK-2970 Hørsholm, Denmark. During
		Flavoured fermented milk-based products including heat-treated products	2,0 g/L (beverages)  20 g/kg (products other than beverages)	and/or Difucosyllactose are consumed the same day.	the per the no lactose mixture	the period of data protection, the novel food 2'-Fucosyllactose/Difucosyllactose mixture is authorised for placing on the market within the Union only by Glycom A/S, 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 Glycom A/S.
		Beverages (flavoured drinks)	2,0 g/L			
		Cereal bars	20 g/kg			
		Infant formula as defined under Regulation (EU) No 609/2013	1,6 g/L in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer			
		Follow-on formula as defined under Regulation (EU) No 609/2013	1,2 g/L in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer			End date of the data protection: 19.12.2024.
		Processed cereal-based food and baby food for infants and young children as defined under Regulation (EU) No 609/2013	1,2 g/L (beverages) in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer			
			10 g/kg for products other than beverages			

**▼**<u>M36</u>

	Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
		Total diet replacement foods for weight control as defined under Regulation (EU) No 609/2013	4,0 g/L (beverages) 40 g/kg (products other than beverages)			
		Food for special medical purposes as defined under 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 intended for the general population excluding infants	4,0 g/day			
<b>▼</b> <u>M9</u>						_
	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 novel food may be used		Additional specific labelling requirements	Other requirements	► <u>M29</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	► M29 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		
	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	exposure of children aged under 8 to guar gum must be visible on		
	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	8 to guar gum must be visible on the label of any foodstuffs containing it.  For example, 'Excessive consumption of these products		

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
			before consumption, in order to take into account the potential risk of gastro-intestinal obstruction.		
Heat-treated milk products fermented with <i>Bacteroides</i> xylanisolvens	Specified food category	Maximum levels			
	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	containing hydroxytyrosol shall 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		
HPLC 12	Edible ices	0,01 %	containing it shall be 'Ice Structuring Protein'		
Aqueous extracts of Iried leaves of <i>Ilex</i>	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
guayusa	Herbal infusions	In line with normal use in herbal infusions and food supplements of	containing it shall be 'Extracts of dried leaves of <i>Ilex guayusa</i> '		
	Food Supplements as defined in Directive 2002/46/EC	The state of the s	and leaves of her guayasa		

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► M29 Data Protection
Isomalto-oligos-	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'.		
Lootital	Serviced food outcome	Manianan Janata	The designation of the navel food		
Lactitol	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 (capsules, tablets or powder) intended for the adult population	20 g/day	supplements containing it shall be 'Lactitol'		

Authorised novel food	Conditions under which the no	vel food may be used	Ad	dditional specific labelling requirements	Other requirements	► <u>M29</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-N-neotetraose are consumed the same day.  3. The labelling of food supplements containing lacto-N-neotetraose intended for young children shall bear a statement that the supplements should not be used if breast milk or other foods with added lacto-N-neotetraose are consumed the same day.			
	Flavoured fermented milk-based products including heat-treated products	0,6 g/l for beverages 9,6 g/kg for products other than beverages				
	Dairy analogues, including beverage whiteners	0,6 g/l for beverages 6 g/kg for products other than beverages 200 g/kg for whitener		tatement buld not or other lacto-N-		
	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				

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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>M29</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 containing it shall be 'Lucerne (Medicago sativa) protein' or 'Alfalfa (Medicago sativa) protein'.		
	sativa	Food supplements as defined in Directive 2002/46/EC	10 g/day			
	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>M29</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 Blakeslea trispora	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Lycopene'		
ыакеsiea 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 no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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	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			
Lycopene oleoresin from tomatoes	Specified food category	Maximum levels of lycopene	The designation of the novel food on the labelling of the foodstuffs		
1	Fruit/vegetable juice-based drinks (including concentrates)	2,5 mg/100 g	containing it shall be 'Lycopene oleoresin from tomatoes'	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>M29</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	1		
	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'  The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Magnolia Bark Extract'		
manace	Food Supplements as defined in Directive 2002/46/EC				
Magnolia Bark Extract	Specified food category	Maximum levels			
LAUACE	Mints (confectionary products)	0,2 % for breath freshening purposes. Based on a 0,2 %			
	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.			
Maize-germ oil high	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
2	Food Supplements as defined in Directive 2002/46/EC	2 g/day	containing it shall be 'Maize-germ oil extract'		
	Chewing gum	2 %			

**▼**M9

·					
Authorised novel	food Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
Methylcellulose	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				
<u>1</u>					
1-Methylnicoti- namide chloride	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 ba on proprietary scient evidence and scientific or protected in accordance v Article 26 of Regulation (I 2015/2283.  Applicant: Pharmena Wolczanska 178, 90 ELOdz, Poland. During period of data protection

**▼**<u>M11</u>

	Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
						novel food 1-methylnicotinamide chloride is authorised for placing on the market within the Union only by Pharmena S.A. 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 Pharmena S.A.
						protection: 2 September 2023
<b>▼</b> <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		
	Silicon)	Food Supplements as defined in Directive 2002/46/EC for adult population (in liquid form)	10,40 mg/day	supplements containing it shall be 'Organic silicon (monomethylsilanetriol)'		

V 1V17						
	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
	Mycelial extract from Shiitake mushroom ( <i>Len</i> -	Specified food category	Maximum levels	The designation of the novel food		
		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 Lentinula edodes' or		
		Ready prepared meals	2,5 ml per meal	'extract from Shiitake mushroom'		
		Foods based on yoghurt	1,5 ml/100 ml			
		Food supplements as defined in Directive 2002/46/EC	2,5 ml per day dose			
▼ <u>M38</u>	Nicotinamide riboside chloride	Specified food category	Maximum levels	The designation of the novel food		Authorised on 20 Februar 2020. This inclusion is
	riboside chioride	Food Supplements as defined in Directive 2002/46/EC	300 mg/day for the general adult population, excluding pregnant and lactating women 230 mg/day for pregnant and lactating women	on the labelling of the foodstuffs containing it shall be 'Nicotinamide riboside chloride'	containing it shall be 'Nicotinamide riboside chloride'	based on proprietary scientific evidence and scientific data protected in accordance with Article 26 of Regulation (EU) 2015/2283.
						Applicant: ChromaDex Inc 10900 Wilshire Boulevar Suite 600, Los Angeles, C. 90024 USA. During the period of data protection the novel food is authorise for placing on the mark within the Union only be ChromaDex Inc. unless subsequent applicant obtain authorisation for that novel food without reference the proprietary scientific evidence or scientific darprotected in accordance with Article 26 of Regulation (EU 2015/2283) or with the agreement of ChromaDe Inc.
						End date of the da protection: 20 Februar 2025.

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
Noni fruit juice (Morinda citrifolia)	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	Pasteurised fruit and fruit nectar based drinks	30 ml with one serving (up to 100 % noni juice) 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 and concentrate	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be:  For fruit puree:  'Morinda citrifolia fruit puree' or 'Noni fruit puree'  For fruit concentrate:  'Morinda citrifolia fruit concentrate' or 'Noni fruit concentrate'		
(Morinda citrifolia)		Fruit puree			
	Candy/confectionery	45 g/100 g			
	Cereal bars	53 g/100 g			
	Powdered nutritional drink mixes (dry weight)	53 g/100 g			
	Carbonated beverages	11 g/100 g			
	Ice cream & sorbet	31 g/100 g			
-	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>M29</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			
	L		j	1 1	

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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 ( <i>Morinda citrifolia</i> )	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
, , , , , , , , , , , , , , , , , , ,	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		
()	Food Supplements as defined in Directive 2002/46/EC	2,4 g per/day	containing it shall be 'Morinda citrifolia fruit powder' or 'Noni fruit powder'		
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	► M29 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	► M29 Data Protection ◀
Oil extracted from squids	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 '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 .		
	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 fruit based prop	Specified food category	Maximum levels	The wording 'pasteurised by		
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		high-pressure treatment' shall be displayed next to the name of the fruit preparations as such and in any product in which it is used	e	

	Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
<b>▼</b> <u>M35</u>						
	Phenylcapsaicin	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		Authorised on 19 December 2019. This inclusion is based
		Foods for special medical purposes as defined under Regulation (EU) No 609/2013 excluding foods for infants, young children and children under the age of 11 years	2,5 mg/day	containing it shall be 'phenylcap-saicin'.	containing it shall be 'phenylcap-saicin'.  on evide prote Artic	on proprietary scientific evidence and scientific data protected in accordance with Article 26 of Regulation (EU) 2015/2283.
		Food supplements as defined in Directive 2002/46/EC intended for the general population, excluding children under the age of 11 years	2,5 mg/day			Applicant: aXichem AB, Södergatan 26, SE 211 34, Malmö Sweden. During the period of data protection, the novel food phenylcapsaicin is authorised for placing on the market within the Union only by aXichem AB, 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 aXichem AB.
<b>▼</b> <u>M9</u>	Phosphated maize	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	<b></b>	Baked bakery products	15 %	containing it shall be 'Phosphated maize starch'		
		Pasta				
		Breakfast cereals				
		Cereal bars				

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
Phosphatidylserine from fish 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 'Fish phos-		
	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-		
	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>M29</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	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	
phosphatidylserine and phosphatidic	Breakfast cereals	80 mg/100 g	dylserine and phosphatidic acid'	pregnant or breast-feeding	
acid	Cereal bars	350 mg/100 g		women	
	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 yuk	Not specified				
Phytoglycogen	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Phytoglycogen'		
-	Processed foods	25 %			

Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► M29 Data Protection ◀
	Specified food category	Maximum levels	In accordance with Annex III.5 of Regulation (EU) No 1169/2011		
	Rice drinks	They shall be presented in such a manner that they can be easily			
	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.	divided into portions that contain either a maximum of 3 g (in case of 1 portion/day) or a maximum of 1 g (in case of 3 portions/day) of added phytosterols/phytostanols.			
	Salad dressings, mayonnaise and spicy sauces.	The amount of phytosterols/ phytostanols added to a container of beverages shall not			
	Soya drink	exceed 3 g.  Salad dressings, mayonnaise and spicy sauces shall be packed as single portions			
	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 no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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 hydrolysates thereof	Not specified		The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Potato protein'		
Prolyl oligopep- tidase (enzyme	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
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	containing it shall be 'Prolyl oligo- peptidase'		
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				

## **▼**M9

▼ <u>IV19</u>						
	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
7 <u>M10</u>						
	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'.  Food supplements containing Pyrroloquinoline quinone disodium salt shall bear the following statement:  This food supplement should be consumed by adults only excluding pregnant and lactating women		Authorised on 2 September 2018. This inclusion is based on proprietary scientific evidence an scientific data protected in accordance with Article 20 of Regulation (EU) 2015 2283.  Applicant: Mitsubishi Gar Chemical Company, Inc. Mitsubishi Building 5-Marunouchi 2-chome Chiyoda-ku, Tokyo 100 8324, Japan. During the period of data protection the provided for placing on the market within the Union only Mitsubishi Gas Chemical Company, Inc., 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 or Regulation (EU) 2015/228. or with the agreement of Mitsubishi Gas Chemical Company, Inc.
						End date of the dat protection: 2 september 202

	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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>M29</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 on the labelling of the food		
		Food Supplements as defined in Directive 2002/46/EC for adult population (capsule or tablet form)	150 mg/day	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>M29</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	on the labelling of the foodst	The designation of the novel food on the labelling of the foodstuffs		
	Milk-based drinks	40 mg/100 g or mg/100 ml	containing it shall be 'Rooster comb extract' or 'Cockerel comb		
	Milk based fermented drinks	80 mg/100 g or mg/100 ml	extract'		
	Yoghurt-type products	65 mg/100 g or mg/100 ml			
	Fromage frais	110 mg/100 g or mg/100 ml			
Sacha inchi oil from Plukenetia volubilis	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
Flukeneuu volublus	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		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>M29</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		
ZI X	Food Supplements as defined in Directive 2002/46/EC for adult population excluding pregnant and lactating women	3 000 mg/day	EPA-rich oil from the microalgae Schizochytrium sp.'	A-rich oil from the microalgae	
	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				
	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 - 08.03.2020 - 014.001 - 63

	Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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			
<b>▼</b> <u>M26</u>						
	Schizochytrium sp. (ATCC PTA-9695)	Specified food category	Maximum levels of DHA	The designation of the novel food on the labelling of the foodstuffs		
	oil	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/100 g			
		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			

## **▼**<u>M26</u>

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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			
	Fruit/vegetable puree	100 mg/100 g			

	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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	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/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				
			j	I	1	

02017R2470 — EN — 08.03.2020 — 014.001 — 66

**▼**<u>M24</u>

	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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			
		Fruit/vegetable puree	100 mg/100 g			
<u>M9</u>						
	Schizochytrium 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			

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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 nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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			
	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'		
<b>▼</b> <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	1. The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Fermented soybean extract'.  2. 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.		

			T		
Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
Spermidine-rich wheat germ extract	Specified food category	Maximum levels	The designation of the novel food on the labelling of the food		
(Triticum aestivum)	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	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
extract	Food Supplements as defined in Directive 2002/46/EC	1,1 g/day	containing it shall be 'Sunflower oil extract'		

Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</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, n 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		on the labelling of the foodsturfs 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		
extract	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'.		

Authorised novel food Conditions under which the novel food may be used		vel food may be used	Additional specific labelling requirements	Other requirements	► M29 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		
UV-treated mushrooms	Specified food category	Maximum levels of vitamin $D_2$	glucose'.		
(Agaricus bisporus)	Mushrooms (Agaricus bisporus)	10 μg of vitamin D <sub>2</sub> /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 (<i>Agaricus bisporus</i>)'.</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>M29</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		
	Yeast leavened bread and rolls (without toppings)	3 μg vitamin D <sub>2</sub> /100 g	'contains vitamin D produced by UV-treatment'		
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'.		

**▼**<u>M9</u>

Authorised novel food	Conditions under which the	e novel food may be used	Additional specific labelling requirements	Other requirements	► M29 Data Protection •
Vitamin K <sub>2</sub> (menaquinone)	To be used in compliance with Directive 20 and/or Regulation (EC) No 1925/2006	002/46/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	The 'Wheat Bran Extract'	
	Beer and substitutes	0,4 g/100 g	on the labelling of the foodstuffs containing it shall be 'Wheat bran	may not be	be
	Ready to eat cereals	9 g/100 g	extract'	introduced onto the market as a	
	Dairy products	2,4 g/100 g		food supple- ment or food	
	Fruit and vegetable juices	0,6 g/100 g		supplement ingredient. Nor	
	Soft drinks	0,6 g/100 g	may it be	may it be added to infant	
	Meat preparations	2 g/100 g		formula.	
Xylo-oligo-	Specified food category	Maximum levels (**)	The designation of the novel food on the labelling of the foodstuffs containing it shall be 'Xylo-oligos- accharides'		
saccharides	White bread	14 g/kg			
	Whole meal bread	14 g/kg			
	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-oligosacc any milk constituent (**) Maximum levels calculated on the basis of				

V IVI						
	Authorised novel food	Conditions under which the no	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
▼ <u>M30</u>	Yarrowia lipolytica yeast biomass	Specified food category	Maximum levels	The designation of the novel food on the labelling of the foodstuffs		
	yeast biolilass	Food Supplements as defined in Directive 2002/46/EC, excluding food supplements for infants and young children	6 g/day for children from 10 years of age, adolescents and general adult population	containing it shall be 'Yarrowia lipolytica yeast heat-killed biomass'		
			3 g/day for children from 3 to 9 years of age			
<b>▼</b> <u>M9</u>	Yeast beta-glucans		Maximum levels of pure	The designation of the novel food		
	rense sem graenns	Specified food category	beta-glucans from yeast (Saccharomyces cervisiae)	on the labelling of the foodstuffs containing it shall be 'Yeast (Saccharomyces cerevisiae) beta-		
		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	glucans'		
		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			

	Authorised novel food	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> Data Protection ◀
		Wholegrain and high fibre instant hot breakfast cereals	1,5 g/kg			
		Cookie-type biscuits	6,7 g/kg			
		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)			
		Chocolate and confectionery	4 g/kg			
		Protein bars and powders	19,1 g/kg			
		Jam, marmalade and other fruit spreads	11,3 g/kg			
<b>▼</b> <u>M12</u>						
	Zeaxanthin	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 mg/day	containing it shall be 'Zeaxanthin'.		
<b>▼</b> <u>M9</u>						
	Zinc L-pidolate	Specified food category	Maximum levels	The designation of the novel food		
		Foods covered by Regulation (EU) No 609/2013	3 g/day	on the labelling of the foodstuffs 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	Conditions under which the nov	vel food may be used	Additional specific labelling requirements	Other requirements	► <u>M29</u> 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				

- (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).
- ► M32 (7) Maximum use levels in the final product ready for use, marketed as such or reconstituted as instructed by the manufacturer.

### **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)

Authorised Novel Food	Specifications
	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 %): $\leq$ 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: $< 0.1 \text{ mg/kg}$
	Residual proteins: $< 0.01 \%$ (w/w)
	Residual solvents:
	2-Propanol: $< 0,1 \% (w/w)$
	Acetone: $< 0.1 \% \text{ (w/w)}$
	Ethyl acetate: $< 0.1 \%$ (w/w)
	Microbiological criteria:
	Salmonella: Absence in 25 g
	Aerobic mesophilic total count:< 500 CFU/g

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 fruit pulp	Description/Definition:
	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 µ) 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
5	
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
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.) Burleaves.
	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
M23		
	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 solven and residual water are removed by evaporation.
		Saponification value: ≤ 230 mg KOH/g
		Peroxide value (PV): $\leq 3 \text{ meq } O_2/\text{kg oil}$
		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>M9</u>		
	Antarctic Krill oil rich in phosp-	Description/Definition:
	holipids from Euphausia superba	Oil rich in phospholipids is produced from Antarctic krill ( <i>Euphausia superba</i> ) by repeated solvent washings with an approved solvent (under Directive 200 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	Description/Definition:
Iaematococcus pluvialis 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 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 ( <i>Ocimum basilicum</i> L.) belongs to the family ' <i>Lamiaceae</i> ' 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 ( <i>Ocimum basilicum</i> 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 %
Betaine	Description/Definition:
	Betaine (N,N,N-trimethylglycine or carboxy-N,N,N-trimethylmethanaminium), in anhydrous (CH <sub>3</sub> ) <sub>3</sub> N <sup>+</sup> CH <sub>2</sub> COO <sup>-</sup> (CAS No: 107-43-7) and monohydrate (CH <sub>3</sub> ) <sub>3</sub> N <sup>+</sup> CH <sub>2</sub> COO <sup>-</sup> .H <sub>2</sub> O (CAS No: 590-47-6) forms is obtained from processing of sugar beets (i.e. molasses, vinasses or betaine-glycerol).
	Characteristics/Composition
	Appearance: Free-flowing white crystals
	Betaine: ≥ 99,0 % (w/w on dry weight basis)
	Moisture: ≤ 2,0 % (anhydrous); ≤ 15,0 % (monohydrate)
	Ash: $\leq 0.1 \%$
	pH: 5,0-7,0
	Residual protein: ≤ 1,0 mg/g
	Heavy metals:
	Arsenic: < 0,1 mg/kg
	Mercury: < 0,005 mg/kg
	Cadmium: < 0,01 mg/kg
	Lead: < 0,05 mg/kg

# **▼**<u>M32</u>

	Authorised Novel Food	Specifications
		Microbiological criteria:
		Total viable count: ≤ 100 CFU/g
		Coliforms: Negative/10 g
		Salmonella sp.: Negative/25 g
		Yeast: ≤ 10 CFU/g
		Mould: ≤ 10 CFU/g
		CFU: Colony Forming Units.
<b>▼</b> <u>M9</u>		
	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: ≤ 0,3 g/100 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 sing 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 dribby 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
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 ste
	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): $\leq 30 \%$
	TGF-β2: 12-18 mg/100 g
	Moisture: ≤ 6,0 %
	pH (5 % solution w/v): 5,5 – 7,6

# **▼**<u>M34</u>

Authorised Novel Food	Specifications
	Lactose: ≤ 3,0 %
	Fat: $\leq 4.5 \%$
	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: $\leq 50 \text{ CFU/g}$
	CFU: Colony Forming Units
<u>M9</u>	
Buglossoides arvensis seed oil	Description/Definition:
· ·	Refined Buglossoides oil is extracted from the seeds of <i>Buglossoides arvensis</i> (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 <sub>2</sub> /kg
Charries over hose (manage	Description/Definition:
Chewing gum base (monome- thoxypolyethylene glycol)	The novel food ingredient is a synthetic polymer (Patent number WO2006016179). It consists of branched polymers of monomethoxypolyethylene
thoaypoiseensteine giseons	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: ≤ 500 CFU/g
	Escherichia coli: Negative to test
	Salmonella: Negative to test
	Staphylococcus aureus: Negative to test
	Pseudomonas aeruginosa: Negative to test
	Description/Definition:
Chia oil from <i>Salvia hispanica</i>	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): ≤ 10 meq/kg
	Insoluble impurities: $\leq 0.05 \%$
	Alpha linolenic acid: ≥ 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

Authorised Novel Food	Specifications
	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 niger	Description/Definition:  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: ≤ 3,0 %  Lipids: ≤ 1,0 %  Proteins: ≤ 6,0 %
Chitin-glucan complex from Fomes fomentarius	Description/Definition:  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: ≤ 3,0 %  Chitin-glucan: ≥ 90 %  Ratio of chitin to glucan: 70:20  Total carbohydrates, excluding glucans: ≤ 0,1 %

Authorised Novel Food	Specifications
	Proteins: ≤ 2,0 %
	Lipids: ≤ 1,0 %
	Melanins: ≤ 8,3 %
	Additives: None
	pH: 6,7-7,5
	Heavy metals:
	Lead (ppm): ≤ 1,00
	Cadmium (ppm): ≤ 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
hitosan 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.
iger)	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): $\leq 10$

Authorised Novel Food	Specifications
	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 Agaricus bisporus
	Ash (% w/w dry weight): $\leq 3.0$
	Proteins (% w/w dry weight): $\leq 2.0$
	Particle size: > 100 nm
	Tapped density (g/cm <sup>3</sup> ): 0,7-1,0
	Fat binding capacity 800 × (w/w wet weight): pass
	Heavy metals:
	Mercury (ppm): $\leq 0.1$
	Lead (ppm): $\leq 1,0$
	Arsenic (ppm): $\leq 1,0$
	Cadmium (ppm): $\leq 0.5$
	Microbiological criteria:
	Aerobic count (CFU/g): $\leq 10^3$
	Yeast and mould count (CFU/g): $\leq 10^3$
	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 $(w_h/w_{0,05})$ : $\leq 0.7$
	Sulphation pattern ( $\Delta Di$ -6S) (%): $\leq 85$
	Loss on drying (%) (105 °C to constant weight): ≤ 10,0
	Residue on ignition (% dry basis): 20-30
	Protein (% dry basis): $\leq 0.5$
	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

# **▼**<u>M9</u>

Authorised Novel Food	Specifications
	Microbiological criteria:  Total viable aerobic count: ≤ 10 <sup>3</sup> CFU/g  Escherichia coli: Not detected in 1 g
	Staphylococcus aureus: Not detected in 1 g  Pseudomonas aeruginosa: Not detected in 1 g  Yeast and moulds: ≤ 10 <sup>2</sup> CFU/g

# **▼**<u>M29</u>

#### **D-ribose**

#### Description

D-ribose is an aldopentose monosaccharide which is produced by fermentation using a transketolase-deficient strain of Bacillus subtilis.

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

CAS No: 50-69-1

Molecular mass: 150,13 Da

Characteristics/Composition

Appearance: Dry with powdery texture, white to slightly yellow in colour

Specific rotation  $[\alpha]_D^{25}$ :  $-19.0^{\circ}$  to  $-21.0^{\circ}$ 

D-ribose purity (% dry basis): -HPLC/RI (8) Method 98,0–102,0 %

Ash: < 0.2 %

Loss on drying (moisture): < 0.5 %Clarity on solution:  $\ge 95 \%$  transmittance

### Heavy metals

 $Lead: \leq 0,1 \ mg/kg$ 

Arsenic:  $\leq 0.1 \text{ mg/kg}$ 

Cadmium:  $\leq 0,1$  mg/kg

Mercury:  $\leq 0.1 \text{ mg/kg}$ 

Microbiological criteria

Total plate count:  $\leq 100 \text{ CFU } (9)/g$ 

Yeast: ≤ 100 CFU/g

<u>V129</u>		
	Authorised Novel Food	Specifications
		Moulds: ≤ 100 CFU/g
		Coliforms: ≤ 10 CFU/g
		Salmonella sp: Negative/25 g
<u> 19</u>		
<u>17</u>		
	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
		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 %
<u> 137</u>		
	Coriander seed oil from Coriandrum sativum	Description/Definition:
		Coriander seed oil is an oil containing glycerides of fatty acids that is produced from the seeds of the coriander plant <i>Coriandrum sativum</i> L.
		Slight yellow colour, bland taste CAS No: 8008-52-4
		CAS INU. 0000-32-4

# **▼**<u>M37</u>

Authorised Novel Food	Specifications
	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)): 7-15 %
	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): ≤ 5,0 meq/kg
	Iodine value: 88-110 units
	Saponification value: 179-200 mg KOH/g
	Unsaponifiable matter: ≤ 15 g/kg
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, matuberries 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

## **▼**M15

**▼**<u>M9</u>

 $\alpha\text{-cyclodextrin}$ 

**Description/Definition:** 

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
<i>Trataegus pinnatifida</i> 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.

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

02017R2
2470 –
- EN-
-08.03
)3.2020 -
-014.
001
101

Authorised Novel Food Specifications complexant, and crystallisation of α-cyclodextrin from the solution; or chromatography with ion-exchange or gel filtration followed by crystallisation of αcyclodextrin 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: α-cyclodextrin, α-dextrin, cyclohexaamylose, cyclomaltohexaose, α-cycloamylase Chemical name: Cyclohexaamylose 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:  $\geq$  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 α-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:  $\leq 0.5 \text{ mg/kg}$ 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 $\alpha$ -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: $10 \mu l$ Procedure: 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) = $100 × (A_S/A_R) (W_R/W_S)$
	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: $\gamma$ -cyclodextrin, $\gamma$ -dextrin, cyclooctaamylose, cyclomaltooctaose, $\gamma$ -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: $[\alpha]_D^{25}$ : between + 174° and + 180° (1 % solution)  Purity:  Water: $\leq 11$ %  Residual complexant (8-cyclohexadecen-1-one (CHDC)): $\leq 4$ mg/kg  Residual solvent (n-decane): $\leq 6$ mg/kg  Reducing substances: $\leq 0.5$ % (as glucose)  Sulphated ash: $\leq 0.1$ %
▼ <u>M21</u>		
	Decorticated grains of <i>Digitaria</i> exilis (Kippist) Stapf (fonio) (Traditional food from a third country)	Description/Definition  The traditional food is the decorticated grain (bran removed) of Digitaria exilis (Kippist) Stapf.  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: ≤ 2,1 mg/g
▼ <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): $\geq$ 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 %
	$A_{\rm w}$ : < 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: ≤ 100 CFU/g
	Salmonella species: Negative/25 g
	Listeria monocytogenes: Negative/25 g
	CFU: Colony Forming Units

	Authorised Novel Food	Specifications
	Dried extract of <i>Lippia citriodora</i> from cell cultures	Description/Definition:
		Dried extract of <i>Lippia citriodora</i> (Palau) Kunth from cell cultures HTN <sup>®</sup> Vb.
	Echinacea angustifolia extract from cell cultures	Description/Definition:
		Extract of the roots of <i>Echinacea angustifolia</i> obtained from plant tissue culture which is substantially equivalent to a root extract from <i>Echinacea angustifolia</i> obtained in ethanol-water titrated to 4 % echinacoside.
▼ <u>M31</u>		
	Echinacea purpurea extract from cell cultures	Description/Definition:
		Dried extract of Echinacea purpurea from cell cultures EchiPure-PCTM
<b>▼</b> <u>M9</u>		
	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: ≥ 10 % w/w of total fatty acids
		Trans fatty acids: ≤ 2,0 % (w/w of total fatty acids)
		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): ≤ 20 µg/ml
		Pyrrolizidine alkaloids: Not detectable with a detection limit 4,0 μg/kg

0201
7R2470
– EN
- 08
- 08.03.202
0 - 0
14.001
-108

#### Specifications

## **▼**<u>M18</u>

#### Egg membrane hydrolysate

#### Description

The egg membrane hydrolysate is derived from the eggshell membranes of chicken eggs. The eggshells undergo hydro-mechanical separation in order to obtain the egg membranes, which are then further processed using a patented solubilisation method. Following the solubilisation process, the solution is filtered, concentrated, spray-dried and packaged.

#### Characteristics/Composition

#### Chemical parameters

Total nitrogen-containing compounds (% w/w): ≥ 88

Collagen (% w/w):  $\geq 15$ Elastin (% w/w):  $\geq 20$ 

Total glycosaminoglycans (% w/w): ≥ 5

Calcium: ≤ 1 %

#### Physical parameters

pH: 6,5 - 7,6

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  $\leq 0.5 \text{ mg/kg}$ 

#### Microbiological criteria

Aerobic plate count: ≤ 2 500 CFU/g

Escherichia coli:  $\leq 5$  MPN/g

Salmonella: Negative (in 25 g)

Coliforms:  $\leq 10 \text{ MPN/g}$ 

Staphylococcus aureus: ≤ 10 CFU/g

Mesophilic spore count: ≤ 25 CFU/g

Thermophilic spore count: ≤ 10 CFU/10 g

#### Methods

Combustion according to AOAC 990.03 and AOAC 992.15

Sircol<sup>TM</sup> Soluble Collagen Assay

Fastin<sup>TM</sup> Elastin Assay

USP26 (chondroitin sulphate K0032 method)

## **▼**M18

Authorised Novel Food		Specificat	ions	
	Yeast: ≤ 10 CFU/g			
	Mould: ≤ 200 CFU/g			
	CFU: Colony Forming Units	; MPN = Most Probable Number; USP: United State	s Pharmacopeia.	
	, , ,	,		
Epigallocatechin gallate as a	Description/Definition:			
purified extract from green tea leaves (Camellia sinensis)	A highly purified extract from minimum of 90 % epigallo-c	n the leaves of green tea (Camellia sinensis (L.) Kun catechin gallate (EGCG), and has a melting point be	tze) in the form of a fine, off-white to pale pink powder. It is composed tween approx. 210 and 215 °C	
	Appearance: off-white to pal	le 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 material)			
	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> 0	$O_2S$		
	Molecular mass: 229,3 Da			
	CAS No.: 497-30-3			
	Parameter	Specification	Method	
	Appearance	White powder	Visual	

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: ≤ 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): $\geq 28 \%$		
	Iron (II): 22-30 % (w/w)		
	Iron (III): $\leq 7.0 \%$ (w/w)		
	Ammonia: 5-9 % (w/w)		
	Water: ≤ 3,0 %		

	Authorised Novel Food	Specifications
	Fish peptides from Sardinops sagax	Description/Definition:  The novel food ingredient is a peptide mixture, which is obtained by an alkaline protease-catalysed hydrolysis of fish (Sardinops sagax) 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: ≤ 10 g/100 g  Moisture: ≤ 8 g/100 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
7 <u>M40</u>	Fruit pulp, pulp juice, concentrated pulp juice from <i>Theobroma cacao</i> L.  (Traditional food from a third country)	Description/Definition  The traditional food is the fruit pulp from the cocoa ( <i>Theobroma cacao</i> L) plant, which is the 'aqueous, mucilaginous and acidic substance in which the seeds are embedded'.  Cocoa fruit pulp is obtained by splitting cocoa pods followed by separation from husks and beans; the pulp is then subject to pasteurisation and freezing. Cocoa pulp juice and/or cocoa concentrated pulp juice are produced following processing (enzymatic treatment, pasteurization, filtration, and concentration).  Typical compositional data of cocoa fruit pulp, pulp juice, concentrated pulp juice  Protein (g/100 g): 0,0 to 2,0  Total fat (g/100 g): 0,0 to 0,2  Total sugars (g/100 g): > 11,0  Brix level (° Brix): ≥ 14  pH: 3,3 to 4,0  Microbiological criteria  Total Plate Count (aerobic): < 10 000 cfu ( <sup>9</sup> )/g  Enterobacteriaceae: ≤ 10 cfu/g  Salmonella: Absence in 25 g

Authorised Novel Food	Specifications	
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 organi 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 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 %

	Alginate: 3,0-6,0 % Polyphloroglucinol: 20-30 % Mannitol: < 1,0 % Natural value (True Minurals: 0.5, 2.0 %)
	Polyphloroglucinol: 20-30 % Mannitol: < 1,0 %
	Mannitol: < 1,0 %
	Natural salts/Free Minerals: 0,5-2,0 %
	Other carbohydrates: 0,5-2,0 %
	Protein: 2,0-2,5 %
	Description/Definition:
ndaria pinnatifida	Fucoidan from seaweed <i>Undaria pinnatifida</i> is extracted using aqueous extraction in acidic solution and filtration processes without the use of organ 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	≤ 200,0 mg/kg in combination	
	Residual endotoxins: ≤ 10 EU/mg		
2'-Fucosyllactose (microbial source)	<ul> <li>M27 Definition:</li> <li>Chemical name: α-L-Fucopyranosyl-(1→2)-β-D-galactopyranosyl-(1→4)-D-glucopyranose</li> <li>Chemical formula: C<sub>18</sub>H<sub>32</sub>O<sub>15</sub></li> <li>CAS No: 41263-94-9</li> <li>Molecular weight: 488,44 g/mol</li> </ul>		
	<b>Source:</b> Genetically modified strain of <i>Escherichia coli</i> K-12	Source: Genetically modified strain of <i>Escherichia coli</i> BL21	
	Description:  2'-Fucosyllactose is a white to off-white powder that is produced by a microbial process.  Purity:  2'-Fucosyllactose: ≥ 83 %  D-Lactose: ≤ 10,0 %  L-Fucose: ≤ 2,0 %  Difucosyl-D-lactose: ≤ 5,0 %  2'-Fucosyl-D-lactulose: ≤ 1,5 %  Sum of saccharides (2'-Fucosyllactose, D-Lactose, L-Fucose, Difucosyl-D-lactose, 2'-Fucosyl-D-lactulose): ≥ 90 %  pH (20 C, 5 % solution): 3,0-7,5  Water: ≤ 9,0 %	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 %	

_
02017
0
7
7R247
15
7
Ö
耳
$\mathbf{Z}$
08.03.202
.~
03
3.202
0
2
9
'N
1.001
ŏ
_
=
1

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: $\leq 0.5$ % (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: ≤ 0,02 mg/kg (powder and liquid)	
	Endotoxins: ≤ 10 EU/mg	Arsenic: ≤ 0,2 mg/kg (powder and liquid)	
		Cadmium: ≤ 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 (liqu	
		Yeasts and Moulds: ≤ 100 CFU/g (powder); ≤ 50 CFU/g (liqu	
		Enterobacteriaceae/Coliforms: absence in 11 g (powder a liquid)	
		Salmonella: negative/100 g (powder), negative/200 ml (liquid	
		Cronobacter: negative/100 g (powder), negative/200 ml (liqu	
		Endotoxins: ≤ 100 EU/g (powder), ≤ 100 EU/ml (liquid)	
		Aflatoxin M1: ≤ 0,025 $\mu$ g/kg (powder and liquid) ◀	

### **▼** M36

### 2'-Fucosyllactose/Difucosyllactose mixture ('2'-FL/DFL') (microbial source)

### **Description/Definition:**

2'-Fucosyllactose/Difucosyllactose mixture is a purified, white to off-white amorphous powder that is produced by a microbial process. After purification, the 2'-Fucosyllactose/Difucosyllactose mixture is isolated by spray drying.

Source: Genetically modified strain of Escherichia coli strain K-12 DH1

#### Characteristics/Composition

Appearance: White to off white powder or agglomerates

Sum of 2'-Fucosyllactose, Difucosyllactose, Lactose and Fucose (% of dry matter):  $\geq$  92,0 % (w/w)

Sum of 2'-fucosyllactose and difucosyllactose (% of dry matter):  $\geq$  85,0 % (w/w)

2'-Fucosyllactose (% of dry matter): ≥ 75,0 % (w/w)

## **▼**<u>M36</u>

Authorised Novel Food	Specifications
	Difucosyllactose (% of dry matter): ≥ 5,0 % (w/w)
	D-Lactose: $\leq 10,0 \% \text{ (w/w)}$
	L-Fucose: $\leq 1.0 \%$ (w/w)
	2'-Fucosyl-D-lactulose: $\leq 2,0 \%$ (w/w)
	Sum of other carbohydrates (11): $\leq 6.0 \%$ (w/w)
	Moisture: $\leq 6.0 \% \text{ (w/w)}$
	Ash, sulfated: $\leq 0.8 \%$ (w/w)
	pH (20 °C, 5 % solution): 4,0-6,0
	Residual protein: $\leq 0.01 \%$ (w/w)
	Microbiological criteria:
	Aerobic mesophilic bacteria total plate count: ≤ 1000 CFU/g
	Enterobacteriaceae: ≤ 10 CFU/g
	Salmonella sp.: Negative/25 g
	Yeast: ≤ 100 CFU/g
	Mould: $\leq 100 \text{ CFU/g}$
	Residual endotoxins: ≤ 10 EU/mg
	CFU: Colony Forming Units; EU: Endotoxin Units
Galacto-oligosaccharide	Description/Definition:
	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 strain of E. coli K-12	Molecular formula: C <sub>6</sub> H <sub>13</sub> NO <sub>5</sub> · HCl
Strain of L. con R-12	Relative molecular mass: 215,63 g/mol
	D-Glucosamine HCl 98,0-102,0 % of reference standard (HPLC)
	Specific rotation + 70,0° - + 73,0°
Glucosamine sulphate KCl 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> · 2KCl
modified strain of L. con 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. Coll 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

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-baker's yeast (Saccharomyces cerevisiae) in which a synthetic gene for the ISP has been inserted into the yeast's genome. The protein is expressed 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 are not transferred into the ISP preparation as such or under an altered form. The ISP preparation consists of native ISP, glycosylated ISP and protein 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 be 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): $\leq 0,5$	

•	by	an

Authorised Novel Food	Specifications	
	Syrup:	
	Dried solids (g/100 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: $\geq 98$ % 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 $\left[\alpha\right]_{D}^{20} = +13^{\circ} \text{ to } +16^{\circ}$
	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: $\leq 0.1 \% \text{ d.b}$
	Nickel: ≤ 2,0 mg/kg d.b
	Arsenic: ≤ 3,0 mg/kg d.b
	Lead: ≤ 1,0 mg/kg d.b

Authorised Novel Food	Specifications		
Lacto-N-neotetraose	Definition:		
(synthetic)	Chemical name: $\beta$ -D-Galactopyranosyl- $(1\rightarrow 4)$ -2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl- $(1\rightarrow 3)$ - $\beta$ -D-galactopyranosyl- $(1\rightarrow 4)$ - D-glucopyranose		
	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): $\geq 96 \%$		
	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 combination		
	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		
	Residual endotoxins: ≤ 10 EU/mg		
Lacto-N-neotetraose	Definition:		
(microbial source)	Chemical name: $\beta$ -D-Galactopyranosyl- $(1\rightarrow 4)$ -2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl- $(1\rightarrow 3)$ - $\beta$ -D-galactopyranosyl- $(1\rightarrow 4)$ -D-glucopyranose		
	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		

	_	

Ger Des Lac Put Ass D-I Lac par Lac Sun pH Wa	
Ger Des Lac Pui Ass D-I Lac par Lac Sur pH Wa	
Des Lac Pur Ass D-I Lac par Lac Sur pH	urce:
Lac Pui Ass D-I Lac par Lac Sun pH	enetically modified strain of Escherichia coli K-12
Pui Ass D-I Lac par Lac Sur pH Wa	escription:
Ass D-I Lac par Lac Sur pH Wa	cto-N-neotetraose is a white to off-white powder that is produced by a microbiological process.
D-I Lac <i>par</i> Lac Sur pH Wa	rrity:
Lac par Lac Sur pH Wa	ssay (water free): $\geq 80 \%$
par Lac Sur pH Wa	Lactose: ≤ 10,0 %
Lac Sun pH Wa	cto- $N$ -triose II: $\leq 3.0 \%$
Sur pH Wa	ra-Lacto-N-neohexaose: ≤ 5,0 %
pH Wa	cto- <i>N</i> -neotetraose fructose isomer: ≤ 1,0 %
Wa	m of saccharides (Lacto-N-neotetraose, D-Lactose, Lacto-N-triose II, para-Lacto-N-neohexaose, Lacto-N-neotetraose fructose isomer): ≥ 92 %
	I (20 C, 5 % solution): 4,0-7,0
A cl	ater: $\leq 9.0 \%$
	sh, sulphated: $\leq 0.4 \%$
	sidual solvents (methanol): ≤ 100 mg/kg
l l	esidual proteins: $\leq 0.01 \%$
	icrobiological criteria:
	erobic mesophilic bacteria total count: ≤ 500 CFU/g
	easts: $\leq 10 \text{ CFU/g}$
	oulds: $\leq 10 \text{ CFU/g}$
	esidual endotoxins: ≤ 10 EU/mg
CF	FU: Colony Forming Units; EU: Endotoxin Units.

## **▼**<u>M20</u>

Lonicera caerulea L. berries (haskap) (Traditional food from a third country)

### **Description/Definition:**

The traditional food are fresh and frozen berries from Lonicera caerulea var. edulis. Lonicera caerulea L. is a deciduous shrub belonging to the Caprifoliaceae family.

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 ( <i>Medicago sativa</i> 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 Blakeslea trispora	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:		
	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 %		

Specifications		
he bark is washed and medical-grade ethanol		

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: $\geq 1.3 \text{ g/}100 \text{ g}$
	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: $\leq 6.0$ mg KOH/g
	Peroxide value (PV): $\leq 10 \text{ mEq O}_2/\text{kg}$

Authorised Novel Food	Specifications		
	Heavy metals:		
	Iron (Fe): $< 1500  \mu g/kg$		
	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 in 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:		
	— H		
	- CH <sub>3</sub> or		
	$- CH_2CH_3$		
	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 acetic 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: $\leq 2.0 \text{ mg/kg}$		
	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: ≤ 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	Description/Definition: Chemical name: N-[4-[[(68)-2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl]methyl]amino]benzoyl]-L-glutamic acid, glucosamine salt Chemical formula: C <sub>32</sub> H <sub>51</sub> N <sub>9</sub> O <sub>16</sub> Molecular weight: 817,80 g/mol (anhydrous) CAS No.: 1181972-37-1 Appearance: Creamy to light-brown powder Purity: Diastereoisomeric purity: At least 99 % of (6S)-5-methyltetrahydrofolic acid Glucosamine assay: 34-46 % in dry basis 5-Methyltetrahydrofolic acid assay: 54-59 % in dry basis Water: ≤ 8,0 % Heavy metals: Lead: ≤ 2,0 ppm Cadmium: ≤ 1,0 ppm Mercury: ≤ 0,1 ppm Arsenic: ≤ 2,0 ppm Boron: ≤ 10 ppm Microbiological criteria: Total aerobic microbial count: ≤ 100 CFU/g Yeasts and moulds: ≤ 100 CFU/g Escherichia coli: Absence in 10g		
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: $\leq 1.0  \mu \text{g/l}$
		Mercury: $\leq 1,0  \mu g/l$
		Cadmium: $\leq 1.0  \mu \text{g/l}$
		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( $^2$ ): $< 10 \text{ mg/ml}$
		Lentinan: $0.8 - 1.2 \text{ mg/ml}$
		(1) Bradford method
		(²) Kjeldahl method
<b>▼</b> <u>M38</u>		
	Nicotinamide riboside chloride	Description/Definition:
		The novel food is a synthetic form of nicotinamide riboside.
		The novel food contains $\geq$ 90 % nicotinamide riboside chloride, predominantly in its $\beta$ form, the remaining components being residual solvents, reaction by-products and degradation products.

# **▼**<u>M38</u>

Authorised Novel Food	Specifications
	Nicotinamide riboside chloride:
	CAS number: 23111-00-4
	EC number: 807-820-5
	IUPAC name: 1-[(2R,3R,4S,5R)-3,4-dihydroxy-5-(hydroxymethyl)oxolan-2-yl]pyridin-1-ium-3-carboxamide;chloride
	Chemical formula: C <sub>11</sub> H <sub>15</sub> N <sub>2</sub> O <sub>5</sub> Cl
	Molecular weight: 290,7 g/mol
	Characteristics/Composition:
	Colour: White to light brown
	Form: Powder
	Identification: Conforms by NMR (nuclear magnetic resonance)
	Nicotinamide riboside chloride: ≥ 90 %
	Water content: ≤ 2 %
	Residual solvents:
	Acetone: ≤ 5 000 mg/kg
	Methanol: ≤ 1 000 mg/kg
	Acetonitrile: ≤ 50 mg/kg
	Methyl tert-butyl ether: ≤ 500 mg/kg
	Reaction by-products:
	Methyl acetate: ≤ 1 000 mg/kg
	Acetamide: ≤ 27 mg/kg
	Acetic acid: ≤ 5 000 mg/kg
	Heavy metals:
	Arsenic: ≤ 1 mg/kg
	Microbiological criteria:
	Total Plate Count: ≤ 1 000 CFU/g
	Yeast and Mould: ≤ 100 CFU/g
	Escherichia coli: Absence in 10 g
Noni fruit juice (Morinda citrifolia	Description/Definition:
•	Noni fruits (fruits of Morinda citrifolia L.) are pressed. The obtained juice is pasteurised. An optional fermentation step before or after the pressing may occ
	Rubiadin: ≤ 10 μg/kg
	Lucidin: ≤ 10 µg/kg

(
)2017R247(
) — EN —
08.03.2020
02017R2470 - EN - 08.03.2020 - 014.001 - 136
-136

## Noni fruit puree and concentrate

Authorised Novel Food

Noni fruit juice powder (Morinda

citrifolia)

(Morinda citrifolia)

# Description/Definition:

amount as used in atomisation).

**Description/Definition:** 

produced juice occurs in one or two ways:

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.

Specifications

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

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

Either by atomisation using maize maltodextrins, this mixture is obtained by keeping the rates of inflow of the juice and maltodextrins constant

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 %
_	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): $\leq 2,0 \%$
	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: $\leq 5,0 \%$
	stigmasterol: ≤ 30 %
	brassicasterol ≤ 3,0 %
	other sterols/stanols: $\leq 3.0 \%$

Authorised Novel Food		Specifications		
	Others:			
	Moisture and volatile: $\leq 0.5 \%$			
	Peroxide value (PV): < 5,0 meq/kg			
	Trans fatty acids: ≤ 1 %			
	- I	uivalent method) of phytosterols/phytostanols:		
	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 methan 99 %.			
Oil extracted from squids	Acid value: ≤ 0,5 KOH/g oil			
	Peroxide value (PV): $\leq 5 \text{ meq } O_2/kg$	g oil		
	p-Anisidine value: ≤ 20			
	Cold test at 0 °C: $\leq$ 3 hours			
	Moisture: $\leq 0.1 \%$ (w/w)			
	Unsaponifiable matter: ≤ 5,0 %Trans	s fatty acids: ≤ 1,0 %		
	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	
	$a_{\mathrm{w}}$	< 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	
▼ <u>M35</u>			
	Phenylcapsaicin	Description/Definition:	
		Phenylcapsaicin ( <i>N</i> -[(4-hydroxy-3-methoxyphenyl)methyl]-7-phenylhept-6-ynamide, C <sub>21</sub> H <sub>23</sub> NO <sub>3</sub> , CAS no: 848127-67-3), is synthesized chemically via a two step synthesis process involving in a first step the production of the acetylenic acid intermediate through a reaction of phenyl acetylene with a carboxylic acid derivative, and in a second step a series of reactions of the acetylenic acid intermediate with vanillylamine derivative to produce phenylcapsaicin.	
		Characteristics/Composition:	
		Purity (% of dry matter): ≥ 98 %	
		Moisture: ≤ 0,5 %	
		Total synthesis related production by-products: $\leq 1.0 \%$	
		N,N-dimethyl formamide: ≤ 880 mg/kg	
		Dichloromethane: ≤ 600 mg/kg	
		Dimethoxyethane: ≤ 100 mg/kg	
		Ethyl acetate: ≤ 0,5 %	
		Other solvents: $\leq 0.5 \%$	
		Heavy metals:	
		Lead: $\leq 1.0 \text{ mg/kg}$	
		Cadmium: ≤ 1,0 mg/kg	
		Mercury: $\leq 0.1$ mg/kg	
		Arsenic: ≤ 1,0 mg/kg	
		Microbiological criteria:	
		Total plate count: ≤ 10 CFU/g	
		Coliforms: ≤ 10 CFU/g	
		Escherichia coli: Negative/10 g	
		Salmonella sp.: Negative/10 g	
		Yeast and mould: ≤ 10 CFU/g	
		CFU: Colony Forming Units	

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: ≤ 0,4 % (as phosphorus) 'high amylose maize' as source
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 $O_2/kg$
	(1) Tocopherols may be added as antioxidants according to Commission Regulation (EU) No 1129/2011

Authorised Novel Food	Specifications
Phosphatidylserine from soya phospholipids	Description/Definition:
	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: ≤ 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 %
	110teiii. 0,0 70
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 preparation)	Specification of the enzyme:
	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	Specifications
	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: ≤ 1,0 mg/kg
	Arsenic: ≤ 1,0 mg/kg
	Cadmium: ≤ 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 μg/kg), total Aflatoxins (< 2,0 μg/kg), Ochratoxin A (< 0,20 μg/kg), T-2 Toxin (< 5 μg/kg), Zearalenone (< 2,5 μg/kg), Fumonisin B1 and B2 (< 2,5 μg/kg)
	(¹) PPI – Protease Picomole International
	( <sup>2</sup> ) PPU – Prolyl Peptidase Units or Proline Protease Units

02017R2470 -
- EN - 08.0
08.03.2020 —
-014.001 —
- 146

## 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>

V 1V12		
	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 in 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

on	steps	

## **▼**<u>M17</u>

# Refined shrimp peptide concentrate

Authorised Novel Food

#### Description

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):  $\leq 1,0 \%$ 

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

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

Potassium: ≤ 0,15 %

Sodium:  $\leq 3.5 \%$ 

#### **Heavy Metals**

Arsenic (inorganic): ≤ 0,22 mg/kg Arsenic (organic): ≤ 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: ≤ 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:  $\leq 20$  CFU/g CFU: Colony Forming Units

ND: Not Detectable

Authorised Novel Food	Specifications
Trans-resveratrol	Description/Definition:
1 rans-resveratroi	Synthetic <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:
	Trans-resveratrol: $\geq 98 \%-99 \%$
	Total by-products (related substances): $\leq 0.5\%$
	Any single related substance: $\leq 0.1\%$
	Sulphated ash: $\leq 0.1 \%$
	Loss on drying: $\leq 0.5\%$
	Heavy metals:
	Lead: ≤ 1,0 ppm
	Mercury: $\leq 0.1$ ppm
	Arsenic: $\leq 1.0$ 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
Rooster comb extract	Description/Definition:
	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: $\leq 0.1 \text{ mg/kg}$
	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 meq O <sub>2</sub> /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): $\leq 2.0$ Meq/Kg
	Schizochytrium sp. oil rich in DHA	Acid value: ≤ 0,5 mg KOH/g
	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 an recognised national/international test methodology (e.g. AOAC)
		Moisture and volatiles: ≤ 0,05 %
		Unsaponifiables: ≤ 4,5 %
		Trans-fatty acids: ≤ 1 %
		DHA content: $\geq 22.5 \%$
		EPA content: ≥ 10 %
26		
	California (ATCC	The world find in the involution ATCC DTA 0005 of the minutes California
	Schizochytrium sp. (ATCC PTA-9695) oil	The novel food is obtained from the strain ATCC PTA-9695 of the microalgae <i>Schizochytrium</i> sp.
		Peroxide value (PV): ≤ 5,0 meq/kg oil
		Unsaponifiables: ≤ 3,5 %  There for a side ≤ 2.0 %
		Trans-fatty acids: $\leq 2.0 \%$
		Free fatty acids: $\leq 0.4\%$
		Docosapentaenoic acid (DPA) n-6: ≤ 7,5 %
		DHA content: ≥ 35 %

	Authorised Novel Food	Specifications
	Schizochytrium sp. oil	Acid value: ≤ 0,5 mg KOH/g Peroxide value (PV): ≤ 5,0 meq/kg oil Moisture and volatiles: ≤ 0,05 % Unsaponifiables: ≤ 4,5 % Trans-fatty acids: ≤ 1,0 % DHA content: ≥ 32,0 %
	Schizochytrium sp. (T18) oil	Acid value: ≤ 0,5 mg KOH/g Peroxide value (PV): ≤ 5,0 meq/kg oil Moisture and volatiles: ≤ 0,05 % Unsaponifiables: ≤ 3,5 % Trans-fatty acids: ≤ 2,0 % Free fatty acids: ≤ 0,4 % DHA content: ≥ 35 %
<b>▼</b> <u>M22</u>		
	Syrup from Sorghum bicolor (L.) Moench. (Traditional food from a third country)	Description/Definition  The traditional food is syrup from Sorghum bicolor (L.) Moench (genus, Sorghum; family, Poaceae (alt. Gramineae)).  The syrup is obtained from stalks of S. bicolor, 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>	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 $K_2$ 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 ( <i>Glycine max</i> (L.)) with a selected strain of <i>Bacillus subtilis</i> var. natto.  Nattokinase activity: 20 000 -28 000 Fibrin degradation unit/g( $^1$ ) Identity: Confirmable Condition: No offensive taste or smell Loss on drying: $\leq 10$ %  Vitamin $K_2$ : $\leq 0,1$ mg/kg

Authorised Novel Food	Specifications
	Heavy metals:
	Lead: $\leq 5.0 \text{ mg/kg}$
	Arsenic: $\leq 3.0 \text{ mg/kg}$
	Microbiological criteria:  Total viable aerobic count: $\leq 10^3 \text{ CFU}(^3)/\text{g}$
	Yeast and mould: $\leq 10^2$ 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
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 $\alpha$ -(1 $\rightarrow$ 6) and $\alpha$ -(1 $\rightarrow$ 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 %

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: ≤ 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): $\leq 1,0$
	Assence (ppin): $\leq 1,0$ Cadmium (ppm): $\leq 0,1$
	Microbiological criteria:
	Yeast and moulds $(CFU/g)$ : $\leq 1000$
	Salmonella: Absence
	Listeria monocytogenes: Absence

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 %
-	
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 %
	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

Authorised Novel Food	Specifications		
Therapon barcoo/Scortum	Description/Definition:		
	Scortum/Therapon barcoo is a species of fish in the family Terapontidae. It is an endemic fresh water species from Australia. It is now reared in fish farm		
	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		
-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 enzymat conversion. These are single-step conversions.		
	Appearance: White or almost white crystals		
	Chemical name: D-tagatose		

Authorised Novel Food	Specifications
	Synonym: D- <i>lyxo</i> -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: $\leq 0.5 \%$ (102 °C, 2 hours)
	Specific Rotation: $[\alpha]_D^{20}$ : $-4$ to $-5.6^\circ$ (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 <sub>15</sub> H <sub>12</sub> O <sub>7</sub>
	Molecular mass: 304,25 Da
	CAS No: 480-18-2
	Specifications:
	Physical parameter
	Moisture: ≤ 10 %Compound analysis
	Taxifolin (m/m): ≥ 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 %.

**Trehalose** 

	0
	020
	01
	7
	R
	$\sim$
	)17R247
	70
	)
	E
	$\rightarrow$
	_
	0
	08.
	03.202
	2
	02
	)(
	_
	0
	1
	4.(
	9
	014.001
	_
	1
	6
ı	2

Description/Definition:

Authorised Novel Food

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: $[\alpha]_D^{20} = +179^\circ$ (5 % aqueous solution, dihydrate), +199° (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- charomyces cerevisiae)	Description/Definition:
	Baker's yeast (Saccharomyces cerevisiae) is treated with ultraviolet light to induce the conversion of ergosterol to vitamin $D_2$ (ergocalciferol). Vitamin $D_2$ content in the yeast concentrate varies between 1 800 000-3 500 000 IU vitamin $D/100$ g (450-875 $\mu g/g$ ).
	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:
Ov-treated bread	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: $0.75-3 \mu g/100 g(^1)$
	Yeast in dough: 1-5 g/100 g $(^2)$
	( <sup>1</sup> ) EN 12821, 2009, European Standard.

Authorised Novel Food	Specifications		
UV-treated milk	Description/Definition:		
	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 pasteur isation. The treatment of the pasteurised milk with UV radiation results in an increase in the vitamin $D_3$ (cholecalciferol) concentrations by conversion of 7 dehydrocholesterol to vitamin $D_3$ .		
	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,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-methylidenecyclohexan-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 $milk(^1)0,5-3,2 \mu g/100 g(^2)$		
	Semi-skimmed milk(1): $0,1-1,5 \mu g/100 g(^2)$		
	(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		
itamin 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 homologue containing primarily MK-7 and to a smaller extent MK-6.		
	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-(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		
	Molecular formula: C <sub>46</sub> H <sub>64</sub> O <sub>2</sub>		

Authorised Novel Food	Specifications
	Molecular weight: 649 g/mol  CH <sub>3</sub> 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 <sub>2</sub> (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

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	Specifications			
	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 (d)/100 g)	Negative		
	Yeast (CFU/g)		< 10	
	Mould (CFU/g)		< 10	
	DP: Degree of polymerization			
	(a) Other carbohydrates include monosaccharides (glu (b) Maltodextrin content is calculated according to th (c) CFU: Colony Forming Units. (d) MPN: Most Probable Number.	cose, xylose and arabinose) and cellobe amount added in the process.	piose.	

	Authorised Novel Food	Specifications		
▼ <u>M30</u>				
	Yarrowia lipolytica yeast biomass	Description/Definition:		
		The novel food is the dried and heat-killed biomass of the yeast Yarrowia lipolytica.		
		Characteristics/Composition:		
		Protein: 45-55 g/100 g		
		Dietary fibre: 24-30 g/100 g		
		Sugars: < 1,0 g/100 g		
		Fat: 7-10 g/100 g		
		Fotal ash: ≤ 12 %		
		Water content: $\leq 5 \%$		
		Dry matter content: ≥ 95 %		
		Microbiological criteria:		
		Total Aerobic Microbial Count: $\leq 5 \times 10^3$ CFU/g		
		Total Yeast and Mould Count: ≤ 10 <sup>2</sup> CFU/g		
		Viable Yarrowia lipolytica cells (10): < 10 CFU/g (i.e. limit of detection)		
		Coliforms: ≤ 10 CFU/g		
		Salmonella spp.: Absence in 25 g		
<b>▼</b> M9				
	Yeast beta-glucans	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)-\(\beta\)-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.		
		Beta-glucans are isolated from yeast Saccharomyces cerevisiae.		
		The tertiary structure of the glucan cell wall of <i>Saccharomyces cerevisiae</i> 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.		

Authorised Novel Food	Specifications		
	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)-β-D-Glucans: > 80 %		
	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

Authorised Novel Food	Specifications
	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:
	▶ $\underline{M31}$ Lead: < 0,2 mg/kg
	Arsenic: < 0,2 mg/kg
	Mercury: < 0,1 mg/kg
	Cadmium: < 0,1 mg/kg ◀
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
	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

Authorised Novel Food	Specifications
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: ≤ 3,0 ppm
	Arsenic: ≤ 2,0 ppm
	Cadmium: ≤ 1,0 ppm
	Mercury: ≤ 0,1 ppm

il		
y		
2. y		
,		
_		0201

(1) Commission Production (FID No. 201/2012 of 0 Mond. 2012 by the state of the Confederation Confed	1222/2009 - Call - E P11
(1) 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
	1
(OLL 83 22 3 2012 n 1)	

Specifications

- (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. ◀

Authorised Novel Food

► M29 (8) HPLC/RI: High-performance liquid chromatography coupled with refractive index detection.

Microbiological criteria:

Pathogen: Absence

Yeasts and moulds: ≤ 100 CFU/g

Total viable mesophilic count: ≤ 1 000 CFU/g

- (9) CFU: Colony-forming unit. ◀
- (10) To be tested immediately after the heat-treatment step. Measures have to be in place to prevent cross-contamination with viable Yarrowia lipolytica cells during packaging and/or storage of the NF.
- (11) 3'-Fucosyllactose, 2'-Fucosyl-galactose, Glucose, Galactose, Mannitol, Sorbitol, Galactitol, Trihexose, Allo-lactose and other structurally related carbohydrates.

<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, Pavne MJ. Reed J. J Sci Food Agric. 2010 Jul;90(9):1473-8.