

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

ANNEX

The Annex to Implementing Regulation (EU) 2017/2470 is amended as follows:

(1) in Table 1 (Authorised novel foods), the following entry is inserted: [*OP, please insert in the EN version in alphabetical order.*]

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements
Frozen, dried and powder forms of <i>Tenebrio molitor</i> larva (yellow mealworm)	Specified food category	Maximum levels (g/100g) (marketed as such or reconstituted according to the instructions)	1. Depending on the form used, the designation of the novel food on the labelling of the foodstuffs containing it shall be ‘frozen yellow mealworm (<i>Tenebrio molitor</i> larva)’, ‘dried yellow mealworm (<i>Tenebrio molitor</i> larva)’, or ‘yellow mealworm (<i>Tenebrio molitor</i> larva) powder’. 2. The labelling of the foodstuffs containing frozen, dried and powder forms of yellow mealworm (<i>Tenebrio molitor</i> larva) shall bear a statement that this	
		FrozenDried or powder		
	Frozen, dried and powder forms of <i>Tenebrio molitor</i> larva (yellow mealworm)			
	Crackers and breadsticks	21		
	Cereal bars	23		
	Biscuits	15		
	Savoury pies and tarts	21		
	Bread bearing statements on the absence or reduced presence of gluten in accordance with the	15		

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

	requirements of Implementing Regulation (EU) No 828/2014			<p>ingredient may cause allergic reactions to consumers with known allergies to crustaceans and products thereof, and to dust mites.</p> <p>This statement shall appear in close proximity to the list of ingredients.</p>	
	Pasta-based products bearing statements on the absence or reduced presence of gluten in accordance with the requirements of Implementing Regulation (EU) No 828/2014	23	10		
	Soups and soup powders	21	9		
	Pasta- or pizza-based products, noodles	23	10		
	Ready-to-eat meals	23	10		
	Salads	21	9		
	Ready-to-eat savouries and snacks	83	32		
	Fruit and vegetable spreads (except products defined in Part I of Annex I to Directive 2001/112/EC and in Part I of Annex I to Directive 2001/113/EC)	10	4		
	Liqueurs and spirits	2	1		
	Chocolate confectionary (for products defined in Part A of Annex I to Directive 2000/36/EC, only in products authorised in accordance with that Directive	15	6		

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

(2) in Table 2 (Specifications), the following entry is inserted: [OP, please insert in the EN version in alphabetical order.]

Authorised Novel Food	Specification																		
Frozen, dried and powder of <i>Tenebrio molitor</i> larva (yellow mealworm)	Description/Definition: The novel food consists of the whole, frozen, dried and powder forms of the yellow mealworm (<i>Tenebrio molitor</i> larva). The term ‘mealworm’ refers to the larval form of <i>Tenebrio molitor</i> , an insect species that belongs to the family of Tenebrionidae (darkling beetles). Another identified scientific synonym is <i>Tenebrio molitor</i> Linnaeus. The entire mealworms are meant for human consumption, no parts are removed. The novel food is intended to be placed on the market in three different forms, namely: whole, blanched and frozen <i>T. molitor</i> larva (frozen); whole, blanched and dried <i>T. molitor</i> larva, which may be in powder form (powder). A minimum 24 hours fasting period is required before killing the insects by a thermal processing to allow the larvae to discard their bowel content.																		
	<table><tr><th>Parameters</th><th>Frozen</th><th>Dried or powder</th></tr><tr><td colspan="3">Characteristics/Composition</td></tr><tr><td>Ash (% w/w)</td><td>< 2.5</td><td>< 6.0</td></tr><tr><td>Water activity</td><td>< 1</td><td>< 0.6</td></tr><tr><td>Moisture (% w/w)</td><td>70-75</td><td>2-8</td></tr><tr><td>Crude protein (N x 6.25) (% w/w)</td><td>13-20</td><td>56-64</td></tr></table>	Parameters	Frozen	Dried or powder	Characteristics/Composition			Ash (% w/w)	< 2.5	< 6.0	Water activity	< 1	< 0.6	Moisture (% w/w)	70-75	2-8	Crude protein (N x 6.25) (% w/w)	13-20	56-64
	Parameters	Frozen	Dried or powder																
	Characteristics/Composition																		
	Ash (% w/w)	< 2.5	< 6.0																
	Water activity	< 1	< 0.6																
	Moisture (% w/w)	70-75	2-8																
	Crude protein (N x 6.25) (% w/w)	13-20	56-64																

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

	Fat (% w/w)	5-9	19-35
	- of which saturated fatty acids (% fat)	0.9-1.9	4.0-9.0
	Digestible carbohydrates (% w/w)	3.5-8.0	5.0-27.0
	Dietary fibre (% w/w)	0.8-2.6	1.5-7.0
	Chitin* (% w/w)	2.0-6.5	3.5-8.2
	Peroxide value (Meq O ₂ /kg fat)	≤ 2	≤ 5
	p-Anisidine value	< 1.1	< 5
	Minerals		
	Manganese (mg/kg)	≤ 5	≤ 11
	Contaminants		
	<i>Heavy metals</i>		
	Lead (mg/kg)	≤ 0,075	≤ 0,075
	Cadmium (mg/kg)	≤ 0,05	≤ 0,1
	Mercury (mg/kg)	≤ 0.01	≤ 0.01
	Arsenic (mg/kg)	≤ 0.02	≤ 0.06
	<i>Mycotoxins</i>		

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

	Aflatoxins (Sum of B1, B2, G1, G2) (µg/kg)	≤ 4	≤ 4
	Aflatoxin B1 (µg/kg)	≤ 2	≤ 2
	Deoxynivalenol (µg/kg)	≤ 200	≤ 200
	Ochratoxin A (µg/kg)	≤ 1	≤ 1
	Fumonisin B1 (µg/kg)	< 80	< 80
	Fumonisin B2 (µg/kg)	<80	<80
	Zearalenone (µg/kg)	< 15	< 15
	<i>Other contaminants</i>		
	Histamine (mg/kg)	< 5	< 5
	Perfluoroalkyl substances (µg /kg)	< 0.1	< 0.1
	Sum of all positive identified PAHs (µg /kg)	< 10	< 10
	Sum of dioxins and dl-PCBs (UB, WHO-TEQ2005)** (pg/g fat)	≤ 5	≤ 5
	Microbiological criteria		
	Total aerobic colony count (CFU/g)	≤ 10 ⁵	≤ 10 ⁵

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

	Enterobacteriaceae (presumptive) (CFU/g)	≤ 100	≤ 100
	Beta-Glucuronidase positive <i>Escherichia coli</i> (CFU/g)	< 10	< 10
	<i>Listeria monocytogenes</i>	Absence in 25g	Absence in 25g
	<i>Salmonella</i> spp.	Absence in 25g	Absence in 25g
	<i>Bacillus cereus</i> (presumptive) (CFU/g)	≤ 100	≤ 100
	Coagulase positive Staphylococci (CFU/g)	≤ 100	≤ 100
	Sulphite-reducing anaerobes (CFU/g)	≤ 30	≤ 30
	Yeasts and moulds (CFU/g)	≤ 100	≤ 100

* Chitin calculated as the difference between the Acid Detergent Fibre fraction and the Acid Detergent Lignin fraction (ADF-ADL), as described by Hahn et al. (2018).

** Upper bound sum of polychlorinated dibenzo-para-dioxins (PCDDs)-polychlorinated dibenzofurans (PCDFs) and dioxin-like polychlorinated biphenyls (PCBs) expressed as World Health Organization toxic equivalent (using WHO-TEFs of 2005)).

CFU: colony forming units.