

Conditions of use:

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

(1)	in Table 1 (Authorised novel foods), the following entry is inserted:				
Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements	Data protection
Powder form of <i>Acheta domestica</i> (house cricket)	Specified food category	Maximum levels (g/100g) (marketed as such or reconstituted according to the instructions)	1.The designation of the novel food on the labelling of the foodstuffs containing it shall be, 'Powdered <i>Acheta domestica</i> (house cricket) 2.The labelling of the foodstuffs containing powder form of <i>Acheta domestica</i> (house cricket) shall bear a statement that this ingredient may cause allergic reactions to consumers with known allergies to crustaceans, molluscs and products thereof, and to dust mites. This statement shall appear in close proximity to the list of ingredients.		Authorised on 3 March 2022. This inclusion is based on proprietary scientific evidence and scientific data protected in accordance with Article 26 of Regulation (EU) 2015/2283. Applicant: Fair Insects BV, Industriestraat 3, 5107 NC Dongen, the Netherlands. During the period of data protection, the novel food is authorised for placing on the market within the Union only by Fair Insects BV, unless a subsequent applicant obtains authorisation for that 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 Fair Insects BV. End date of the data protection: 3 March 2027.'
	Powder				
	Powder forms of <i>Acheta domestica</i>				
	Protein products other than meat analogues	20			
	Bread and rolls	10			
	Bakery wares, cereal bars, and stuffed pasta products	15			
	Biscuits	8			
	Pasta-based products (dry)	1			
	Soups and soup concentrates or powders	5			
	Processed potato products, legumes- and vegetable-based dishes, and pasta- or pizza-based products	5			
	Corn flour based snacks	20			
	Beer-like beverages, alcoholic drink mixes	1			
	Nuts, oilseeds and chickpeas	25			
Sauces	10				
Meat preparations	16				

	Meat analogues	50			
	Chocolate confectionary	10			
	Frozen fermented milk based products	5			

(2) in Table 2 (Specifications), the following entry is inserted:

Authorised Novel Food	Specification
'Powder form of <i>Acheta domestica</i> (house cricket)	<p>Description/Definition: The novel food consists of the powder forms of the house cricket. The term 'house cricket' refers to the adult <i>Acheta domestica</i>, an insect species that belongs to the Gryllidae family. The novel food is intended to be marketed as thermally processed freeze-dried and ground whole <i>A. domestica</i> (whole AD powder). A minimum 24 hours fasting period is required before killing the insects by freezing, to allow the adults to discard their bowel content.</p> <p>Characteristics/Composition (AD powder): Ash (% w/w): 2,9–5,1 Moisture (% w/w): ≤ 5 Crude protein (N x 6,25) (% w/w): 55–65 Digestible Carbohydrates (% w/w): 1–4 Fat (% w/w): 29–35 of which saturated (% w/w): 36–45 Peroxide value (Meq O₂/kg fat): ≤ 5 Dietary fibre (% w/w): 3–6 Chitin (% w/w): 5,3-10,0 Heavy metals: Lead: ≤ 0,05 mg/kg Cadmium: ≤ 0,06 mg/kg Mycotoxins: Aflatoxins (Sum of B1, B2, G1, G2): ≤ 4 µg/kg Aflatoxin B1 (µg/kg): ≤ 2 Deoxynivalenol: ≤ 200 µg/kg Ochratoxin A: ≤ 1 µg/kg Dioxins and dioxin like PCBs Sum of dioxins and dioxin-like PCBs UB, (**)WHO₂₀₀₅ PCDD/F-PCB-TEQ): ≤ 1,25 pg/g fat Microbiological criteria: Total aerobic colony count: ≤ 10⁵ CFU/g Yeasts and moulds: ≤ 100 CFU/g <i>Escherichia coli</i>: ≤ 50 CFU/g <i>Salmonella</i> spp.: Absence in 25 g <i>Listeria monocytogenes</i>: Absence in 25 g Sulfite-reducing Anaerobes: ≤ 30 CFU/g <i>Bacillus cereus</i> (presumptive): ≤ 100 CFU/g Enterobacteriaceae (presumptive): < 100 CFU/g Coagulase-positive <i>staphylococci</i>: ≤ 100 CFU/g</p>

FAIR INSECTS B.V. –Magistratenlaan 16, 5223 MD 's-Hertogenbosch (The Netherlands) Tel. +31 162 782 501

Produced and marketed by:

NUTRINSECT SRL – Villa E. Mattei 65-62010 Montecassiano (MC) Tel. 071 9728143 e-mail: info@nutrinsect.it, with the agreement of FAIR INSECTS B.V.



Technical Data Sheet

POWDERED ACHETA DOMESTICUS (HOUSE CRICKET)

Revision Date: 09/09/2024

FAIR INSECTS B.V. –Magistratenlaan 16, 5223 MD 's-Hertogenbosch (The Netherlands) Phone. +31 162 782 501

Produced and Marketed by: NUTRINSECT SRL – Villa E. Mattei 65-62010 Montecassiano (MC) Phone 071 9728143 e-mail: info@nutrinsect.it, with the agreement of FAIR INSECTS B.V.

Product Description

The product is obtained from the freeze-drying and subsequent grinding of frozen house crickets (*Acheta domesticus*).

This technological process allows the removal of water from the product with minimal deterioration of its structure and maximum preservation of its chemical-organic and organoleptic properties.

The product appears as a beige powder with an average particle size of <0.9 mm and a soft, light consistency. Upon tasting, it presents a cereal-like flavor with a savory, typically umami aftertaste. For this reason, it is suitable for numerous culinary preparations, both sweet and, particularly, savory. The product is obtained from crickets raised in ITALY.

ORGANOLEPTIC	DESCRIPTION
Color	Beige
Appearance	Homogeneous
Texture	Fine powder
Taste	Typical, savory, <i>umami</i>
CHEMICAL-PHYSICAL	VALUES
- Ash	2,9 - 5,1 %
- Moisture	Max. 5 %
- Crude Protein (N x 6,25)	55 - 65 %
- Digestible Carbohydrates	1 - 4 %
- Fat	29 - 35 %
of which saturated	36 - 45%
- Peroxide index	Max. 5 meq O ₂ /kg of fat
- Dietary Fiber	3 - 6 %
- Chitin*	5,3 - 10 %
- Lead (Pb)	Max. 0,05 mg/kg
- Cadmium (Cd)	Max. 0,06 mg/kg
- Aflatoxin B ₁ +B ₂ +G ₁ +G ₂	Max. 4 µg/kg
- Aflatoxin B ₁	Max. 2 µg/kg
- Deoxyivalenol (DON)	Max. 200 µg/kg
- Ochratoxin A	Max. 1 µg/kg
- Sum o f dioxins and PCBs UB (WHO-2005 PCDD/F-PCB-TEQ)**	Max. 1,25 pg/g of fat

* Dietary fibers may not include chitin due to differences between analytical methods.

** Sum of upperbound polychlorinated dibenzo-p-dioxins (PCDD), polychlorinated dibenzofurans (PCDF), and dioxin-like polychlorinated biphenyls (PCB) expressed in World Health Organization toxicity equivalents (using WHO-TEF 2005).

MICROBIOLOGICAL	LIMITS
- Total Mesophilic Count	Max. 100.000 ufc/g
- Molds and Yeasts	Max. 100 ufc/g
- <i>E. coli</i>	Max. 50 ufc/g
- <i>Salmonella spp</i>	Absent/25 g
- <i>Listeria monocytogenes</i>	Absent/25 g
- Sulfite-reducing Anaerobes	Max. 30 ufc/g
- <i>Bacillus cereus (presumptive)</i>	Max. 100 ufc/g
- Enterobacteriaceae (<i>presumptive</i>)	Max. 100 ufc/g
- Coagulase-positive staphylococci	Max. 100 ufc/g

Average nutritional values g/100 g

-Energy	2051,14kJ/490kcal
-Protein	60,4
-Fat	29,4
of which saturated	12,34
-Carbohydrates	8,53
of which digestible	3,02
of which sugar	1,90
-Salt	1,21
-Moisture	1,67

Features

Cricket powder is characterized by a high protein content, close to 60%, and contains all the essential amino acids for human nutrition. Additionally, it has no added sugars, is rich in unsaturated fatty acids, and is an interesting source of fiber and iron. The product is ideal for protein enrichment of a wide range of products including corn-based snacks, cereal bars, crackers, biscuits, bread rolls, pizza bases, protein wraps, and other fine baked goods. Cricket powder can also be used as a protein addition for shakes, smoothies, and frozen yogurt, or mixed into dough for the preparation of dry pasta. Other key applications of the ingredient include meat-based preparations, meat substitutes, and processed potato products.

Usage Instructions: It is recommended to pre-disperse the product in other dry/powdered ingredients in the formulation to ensure homogeneous distribution in the final product.

Note: The addition of A. domesticus powder to food must always comply with the maximum inclusion levels set by Reg. (EU) 188/2022 as outlined below:

SPECIFIED FOOD CATEGORY	MAXIMUM LEVELS (g/100g)
Protein products other than meat analogues	20
Bread and rolls	10
Bakery wares, cereal bars, and stuffed pasta products	15
Biscuits	8
Pasta-based products (dry)	1
Soups and soup concentrates or powders	5
Processed potato products, legumes- and vegetable-based dishes, and pasta- or pizza-based products	5
Corn flour based snacks	20
Beer-like beverages, alcoholic drink mixes	1
Nuts, oilseeds and chickpeas	25
Sauces	10
Meat preparations	16
Meat analogues	50
Chocolate confectionary	10
Frozen fermented milk based products	5

Origin

Country of origin: ITALY

Food Safety

GMO

The product is not derived from genetically modified material and is manufactured in accordance with the requirements established by Regulation (EC) No 1829/2003 on genetically modified food and feed and Regulation (EC) No 1830/2003 on the traceability and labeling of genetically modified organisms and the food and feed products produced from them. As such, the product is considered conventional and is not subject to GMO labeling requirements in accordance with Regulation (EC) No 1829/2003 and Regulation (EC) No 1830/2003.

IONIZING RADIATION CONTAMINANTS

The product in question is not subject to treatment with ionizing radiation. It complies with Regulation (EU) No 915/2023 and subsequent amendments. It also complies with Regulation (EC) No 396/2005 and subsequent amendments.

Allergens

In accordance with Regulation (EU) No 1169/2011 and subsequent amendments.

ALLERGEN	PRESENCE	ABSENCE	CROSS-CONTAMINATION
Gluten-containing cereals*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Crustaceans and crustacean products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Eggs and egg products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fish and fish products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Peanuts and peanut products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Soybeans and soybean products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Milk and milk products (including lactose)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nuts**	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Celery and celery products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mustard and mustard products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sesame seeds and sesame products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sulphites E 220 - E 227 (>10 mg/Kg of SO ₂)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lupin and lupin products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Molluscs and mollusc products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

* Wheat, rye, barley, oats, spelt, kamut or their hybridized strains.

** Almonds (*Amygdalus communis* L.), hazelnuts (*Corylus avellana*), common walnuts (*Juglans regia*), cashew nuts (*Anacardium occidentale*), pecan nuts [*Carya illinoensis* (Wangenh.) K. Koch], Brazil nuts (*Bertholletia excelsa*), pistachios (*Pistacia vera*), Queensland nuts (*Macadamia ternifolia*) and derived products.

NOVEL FOOD Legislation

AUTHORIZATION

This product qualifies as a novel food in accordance with Regulation (EU) 2015/2022.

This product is authorized for market placement under Commission Regulation (EU) 2022/188 of 10 February 2022.

The sole license holder is Fair Insects B.V., and Nutrinsect produces and markets the product with the agreement of Fair Insects B.V.



Technical Data Sheet

POWDERED ACHETA DOMESTICUS (HOUSE CRICKET)

Revision Date: 09/09/2024

Commercial Identification and Packaging

COMMERCIAL DESCRIPTION	POWDERED ACHETA DOMESTICUS (HOUSE CRICKET) – Packages of 1 or 5 kg. Cartons of 10 kg.
PACKAGING	Aluminum packages of 1 or 5 kg (C/LDP E 90) Compliant with D.M. 21.3.1973 and subsequent amendments; Regulation (EC) No 1935/2004 and subs. amend.; Regulation (EC) No 2023/2006 and subs. amend.; Regulation (EU) No 10/2011 and subs. amend.
LABELING	<u>POWDERED ACHETA DOMESTICUS (HOUSE CRICKET) (Country of Origin: ITALY)</u> In accordance with Regulation (EU) 2022/188 and the Decree of April 6, 2023, by the Ministry of Agriculture, Food Sovereignty, and Forests published in the Official Gazette of the Italian Republic N. 302.
SPECIFIC ADDITIONAL LABELING REQUIREMENTS	The label of food products containing Acheta domesticus (house cricket) frozen, dried, or in powder form must indicate the following: <i>"Acheta domesticus (house cricket) may cause allergic reactions in consumers with known allergies to crustaceans and crustacean products, molluscs and mollusc products, and dust mites."</i> This indication must appear next to the list of ingredients.

Storage

BEST BEFORE	Preferably use within 12 months from the date of production.
STORAGE	Store in a cool, dry, and well-ventilated place; away from direct sunlight, not in contact with floors, chemicals, or odorous products.