



TEXTURED INSECT PROTEIN POWDER

PRODUCT SHEET



Divaks UAB, V. Kudirkos str. 22, LT-01113 Vilnius, Lithuania
www.divaks.com | sales@divaks.com | +370 612 99200



Started in 2020, Divaks is developing fully automated vertically integrated insect protein business. Our goal is to create high-quality insect-derived ingredients for the food industry, that excel in nutritional and functional qualities.

Since the beginning of the company, we are committed to sustainable choices – we build our insect farms relying on the principles of circular economy, traceable materials, and a guarantee to ensure the best living, breeding, and rearing conditions to our insects.

This Product Sheet represents the nutritional, functional and sensory qualities of our hybrid textured protein powder, produced from insect and pea proteins.

GENERAL INFORMATION

Our ingredient offers a blend of nutrition, taste, and sustainability, making it a versatile choice for a wide range of applications, including snacks, bakery products, confectionery, sauces, seasonings, meat substitutes, and more. Its adaptability stems from its easily blendable fine powder form and unique sensory properties.

The primary special ingredient in our textured protein powder is whole insect powder derived from yellow mealworms (*Tenebrio molitor*). When combined with pea protein, it forms a hybrid protein ingredient that elevates your product with nutritional and sensory qualities, marking a significant innovation in the food industry.



NUTRITIONAL PROFILE

Our textured protein provides a protein content of over 61%, encompassing all essential amino acids. It also contains predominantly healthy fats, along with dietary fibers, adding significant nutritional value.

KEY NUTRITIONAL BENEFITS:



NUTRITIONAL CONTENT per 100 g of product

Energy	1728kJ/ 412 kcal
Protein	61,3 g
Fat	14,9 g
<i>Saturated fat</i>	3,7 g
<i>Monounsaturated fat</i>	6,8 g
<i>Polyunsaturated fat</i>	4,4 g
Carbohydrates	5,4 g
<i>Sugar</i>	0,4 g
Fiber	5,5 g
Salt	0,3 g
Iron	0,14 g
Cholesterol	0,05 g

KEY FEATURES

POWDER TEXTURE

Fine powder that perfectly blends into many applications & it is easy to apply

UNIQUE FLAVOUR

Subtle, clean & slightly nutty flavour with umami undertones

NUTRITION

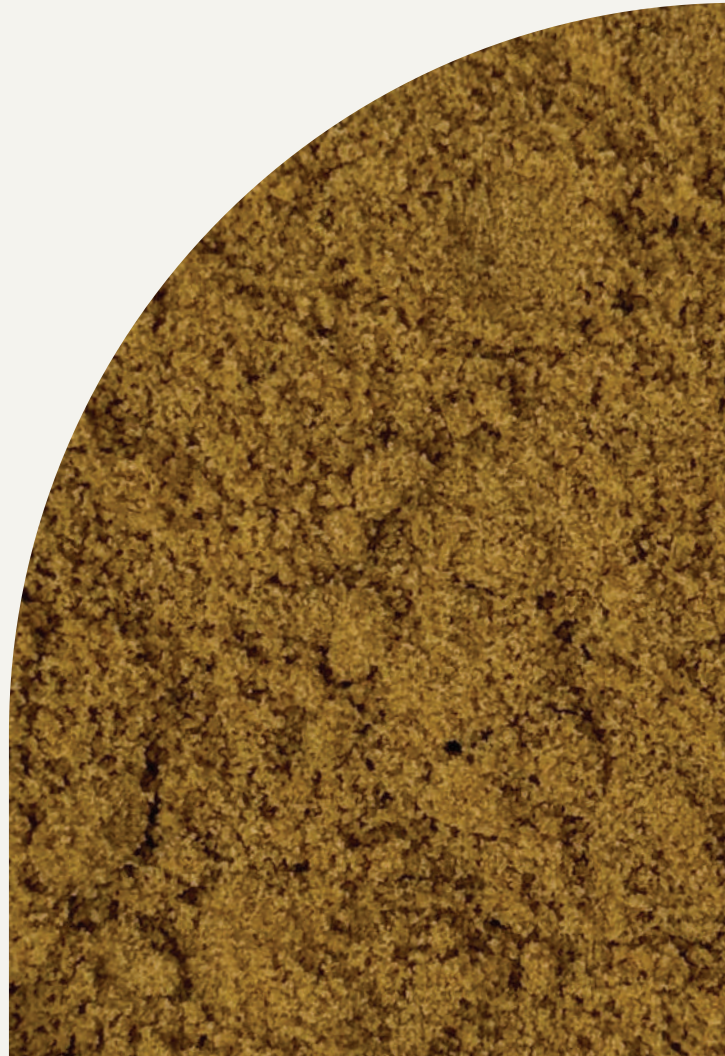
Provides complete proteins, healthy animal-origin fats and high levels of dietary fibre

APPLICATION RANGE

Due to versatile sensory properties and the powder texture ingredient is ideal for a broad range of applications

SUSTAINABILITY

Insect proteins are produced in a more environmentally friendly way than traditional ones

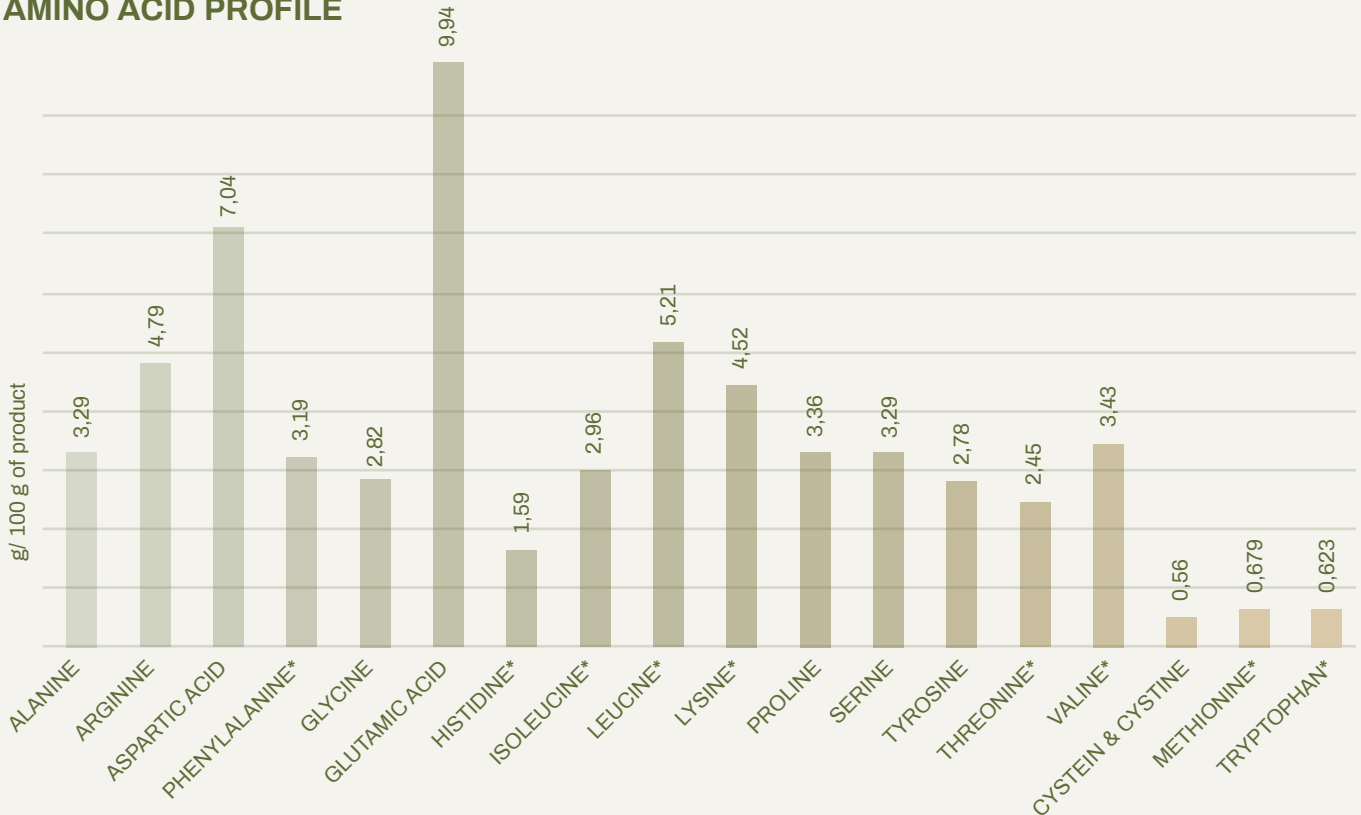


PROTEIN COMPOSITION

COMPLETE PROTEIN PROFILE

Our textured protein powder, a blend of insect and pea proteins, offers an exceptional amino acid profile. With essential amino acids (EAAs) comprising 40% of the total protein, it is the perfect ingredient for sports nutrition and protein-focused diets.

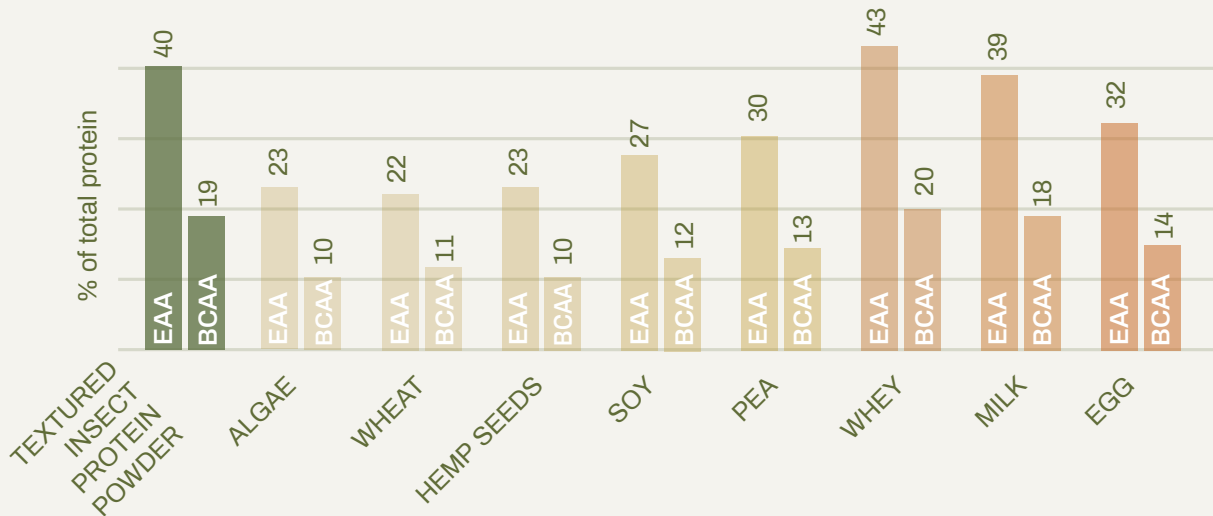
AMINO ACID PROFILE



*Essential amino acids

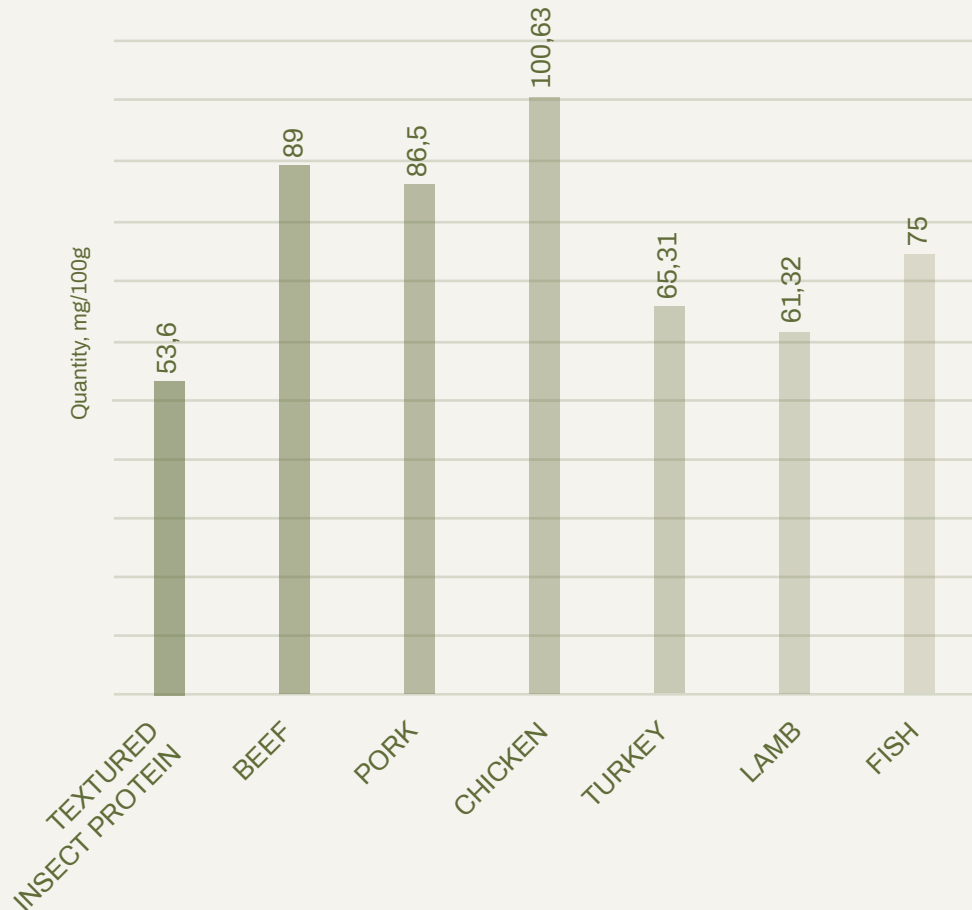
The ingredient's high levels of essential amino acids (EAAs) and branched-chain amino acids (BCAAs) are comparable to high-quality traditional proteins like whey or milk and surpass many plant-based protein sources.

ESSENTIAL AMINO ACIDS (EAA) VS BRANCHED-CHAIN AMINO ACIDS (BCAA)



Source: Gorissen SHM, Crombag JJR, Senden JMG, Waterval WAH, Bierau J, Verdijk LB, van Loon LJC. Protein content and amino acid composition of commercially available plant-based protein isolates. *Amino Acids*. 2018 Dec;50(12):1685-1695.

AVERAGE CHOLESTEROL LEVELS IN DIFFERENT TYPES OF MEAT



MAXIMUM USE LEVELS IN FOOD

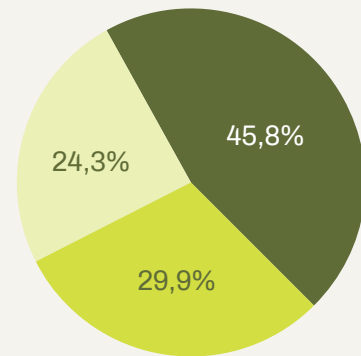
	g/100 g*
Multigrain bread and rolls; crackers and breadsticks	25
Cereal bars	37,5
Dried pasta based products; pasta based dishes (excluding dried puffed pasta); pizza and pizza-like dishes	25
Dried stuffed pasta-based products	37,5
Pre-mixes (dry) for baked products	37,5
Sauces	25
Potato, legumes based dishes	25
Whey powder	50
Meat analogues	100
Soups and salads	12,5
Chips/crisps	50
Beer-like beverages; mixed alcoholic drinks; alcoholic drink mixes	2,5
Chocolate confectionery	25
Nuts, oilseeds and chickpeas	75
Frozen fermented milk-based products	12,5
Meat preparations	40




*Commission Implementing Regulation (EU) 2022/169 of 8 February 2022 authorising the placing on the market of frozen, dried and powder forms of yellow mealworm (*Tenebrio molitor* larva) as a novel food under Regulation (EU) 2015/2283 of the European Parliament and of the Council, and amending Commission Implementing Regulation (EU) 2017/2470

FATTY ACID PROFILE

FATTY ACIDS	% of total fat
Lauric Acid, (C12:0)	0,22
Myristic acid, (C14:0)	2,75
Palmitic acid, (C16:0)	17,09
Palmitoleic acid, (C16:1)	2,33
Margaric acid, (C17:0)	0,14
cis-heptadecanoic acid, (C17:1)	0,12
Stearic acid, (C18:0)	3,71
C18:1 C11	0,30
Oleic acid, (C18:1 n9)	42,45
Linoleic acid, (C18:2)	27,54
Arachidic acid, (20:0)	0,17
cis-11-eicosenoic acid, (C20:1)	0,15
α-Linolenic acid (C18:3)	2,10
Other	<1

OMEGA FATTY ACIDS	% of total fat
Omega-3	2
Omega-6	28
Omega-9	43



-  Saturated fatty acids
-  Monounsaturated fatty acids
-  Polyunsaturated fatty acids

VITAMINS AND MINERALS COMPOSITION

VITAMINS

	per 100 g of product	% of DRI ¹
Vitamin E	2,48 mg	19,1
Vitamin K1	11,2 µg	16,0
Vitamin B9	80,7 µg	24,5
Vitamin B1 ²	55 µg	4,6
Vitamin B2	0,361 mg	22,6
Vitamin B3 ²	3,97 mg	24,8
Vitamin B5	1,54 mg	30,8
Vitamin B6	0,228 mg	13,4
Biotin	31,3 µg	78,3

MINERALS

	per 100 g of product	% of DRI*
Potassium	1501 mg	42,9
Phosphorus	659 mg	119,8
Zinc	9,2 mg	56,3
Manganese	1,2 mg	38,7
Iron	14,2 mg	129,1
Copper	1,4 mg	85
Magnesium	124 mg	35,4
Calcium	88,3 mg	9,3

¹Source for DRI calculations: <https://multimedia.efsa.europa.eu/drvs/index.htm>

²DRI calculated using recommended nutrient intake by World Health Organisation
source: <https://iris.who.int/bitstream/handle/10665/42716/9241546123.pdf?sequence=1>

POSSIBLE APPLICATIONS

Textured Insect Protein Powder with a distinctive, adaptable flavor profile boasting subtle nutty and umami notes, enhances products with complete proteins, dietary fibers, and healthy fats. Its powdered and blendable texture renders it ideal for a myriad of applications.

BAKERY

Recommended use level:
up to 20%



- Sweet biscuits & cookies
- Baking ingredients
- Bread
- Crackers

SNACKS & CEREALS

Recommended use level:
up to 20%



- Protein bars
- Energy bars/balls
- Chips
- Breakfast cereals
- Cereal bars

CONFECTIONERY

Recommended use level:
up to 20%



- Chocolates
- Wrapped pieces
- Eclairs
- Cakes
- Sweet fillers

This ingredient is remarkably versatile, seamlessly blending into sweet and savoury creations, enriching their nutritional profiles. It makes an excellent option for enhancing the nutrition of lower-value products.

MEAT SUBSTITUTES

Recommended use level:
5-20%



- Sausages
- Meatballs
- Burger patties

SAUCES & SEASONINGS

Recommended use level:
5-20%



- Pasta sauces
- Cooking sauces
- Meat seasonings
- Broth seasonings

PASTA

Recommended use level:
up to 20%



- Lasagna
- Spaghetti
- Macaroni, etc.

ADDITIONAL INFORMATION

Format	Powder
Size	Particle size <1 mm
Colour	Brownish to brown
Flavour	Slightly nutty, umami
Protein source	Insects (<i>Tenebrio molitor</i>), peas
Storage conditions	Max 12 months at +5°C - +25°C temperature
Supply form	Plastic bags
Allergens	May contain traces of gluten, soy, milk and lupine.
Purpose of use	The product is prepared for indirect human consumption for any group of consumers except baby food preparation
Regulations	Regulation (EU) No 1169/2011, Regulation (EU) 2015/2283 and Regulation (EU) 2022/169

The above-mentioned information is based on our experience as well as on internal standardized tests and is not to be interpreted as a warranty or guarantee in any form, as conditions beyond our control can affect the quality of the product. In case of doubt, the user should always make every effort to ensure that the products used are appropriate for the purpose intended.

**Reinvent
your
product's
nutritional
profile**



CONNECT WITH US



Divaks UAB

V. Kudirkos str. 22
LT-01113 Vilnius
Lithuania

sales@divaks.com
www.divaks.com



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