



Ingredients for bakery
and confectionary industries



**BAKING ONLY
FROM NATURAL
INGREDIENTS**

ABOUT US

Partner-M is the leading Russian manufacturer of food and feed ingredients. Since 2005, we specialize on deep processing of vegetable raw materials and production of textured plant proteins, as well as starch ingredients, dietary fibers, dairy and animal proteins and many other additives. Company's products have versatile application and are used in the meat, feed, dairy, fish, vegan, bakery, confectionery and canned food industries.

We work in the most important sphere of human activities – in the field of nutrition. Providing people and animals with food, we put quality, safety, diversity and accessibility of ingredients at the forefront of our work. Our mission is to produce qualitative food and feed ingredients for the health of all segments of the population.

50 000 ton

food & feed
ingredients per year



R&D

We are proud of our highly intelligent creative research center who leads the development of new products and technological solutions unique to the domestic and foreign markets. Cooperating with leading scientific and research organizations, the scientific and technological group of our company develops innovative solutions for the food industry, introducing the most advanced and promising technological processes for the production of new ingredients.

ISO **22000**

food safety
management
system certificate

2005

was founded in



LABORATORY

The world business standards are introduced at the Partner-M enterprise. We work in accordance with the ISO 22000 certification procedure, and, this year, we will complete the process of obtaining the HACCP certificate, thereby guaranteeing customers the highest quality of our products.

We work only with reliable suppliers of raw materials. We have a well-equipped, modern laboratory, where we carry out end-to-end quality control – from incoming raw materials to the final product. The high quality of all ingredients is guaranteed!



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FLOUR



GLUTEN ALTERNATIVE PROTELON 22

high protein wheat flour - a beneficial substitution for gluten

Protelon 22 is a high-protein, high-quality wheat flour acting as a cost-effective alternative to wheat gluten or devitalized wheat gluten.

Features and Benefits:

- high-protein (22%) fraction of wheat flour with a gluten level of 55% and its 1st group quality, together with a low moisture content (8%)
- increases the output of finished products by 1-3% due to the addition of an extra amount of dry product (we use 2.0 kg instead of 1.0 kg) and an increase of water for mixing
- improves the organoleptic characteristics of the finished product, without the use of artificial components, giving it a more pronounced bakery taste
- stabilizes the quality of flour with low gluten, increases the volume of products, improves the gas-holding capacity of the dough
- easy to use (stirring), perfectly integrates into flour, easily interferes with the dough, and does not add gray streaks visible on the cut, as when using gluten alone
- brightens the crumb of the finished product by 1-2 tones (on products made from wheat flour)
- increases the freshness time (an increase from 5 to 7 days)
- made from Russian wheat, non-GMO
- has no E-index, «clean label»
- efficiency is confirmed, the product is recommended for implementation by the Research and Development Center of Bakery Product Manufacturing Industry



Learn more about the product



Application:

Up to 10% replacement of flour in the recipe or as a content corrector of the quantity and quality of gluten - based on the results of product testing:

- mixed rye breads, breads with the addition of whole-grain flour or flour with high fiber content, national breads, and pastries
- puff pastry and dough for cook-chill food

Product characteristics:

Name, trademark	High-protein wheat flour «Protelon» brand 22 (native)
Organoleptic characteristics:	
- type, shape, and size of particles	grinding size, pass through a sieve 400 mesh (37 microns), not less than 90 %
- color, smell, taste	fine, white free-flowing powder, neutral
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	10,0
- weight fraction of starch,%, no more	57,2
- weight fraction of protein,%, not less	19,3
- weight fraction of gluten,%, not less	54-60
- gluten quality on the device IDK-3M, units	60-70
- weight fraction of ash,%, no more	1,3
- weight fraction of carbohydrates,%, not less	63,8

Flour



WHEAT COLD SWELLING FLOUR AMILON 80/21

wheat cold swelling flour

Amilon 80/21 is a physically modified wheat flour with a starch content of 80%, which has the ability to cold swell and gelatinize in water based suspensions.

Features and Benefits:

- produced from Russian non-GMO wheat using green technology
- has the effect of cold moisture-binding in emulsion systems and gelation in cold dispersions
- creates a finely porous plastic biscuit structure, reduces its crumbling
- increases the output of finished products
- used as a highly dispersing functional high moisture-binding ingredient, increasing viscosity, reducing water activity, and degradation of starches
- protein content - at least 8%
- starch content - at least 80%

Application:

- biscuits
- muffins
- Viennese waffles

Learn more about the product



Product characteristics:

Name, trademark	Starch wheat flour Amilon 80/21
Organoleptic characteristics:	
- type, shape, and size of particles	fine flour - not less than 90% of 100 mesh particles (150 microns)
- color, smell, taste	white, without foreign tastes and odors
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	12,0
- weight fraction of protein, % not less	8,0
- weight fraction of fat, %, no more	1,0
Functional properties:	
- degree of hydration	1: 3-4 and higher
- influence on the rheology of food systems	viscosity regulator, gelling agent

Flour



NATIVE SOY FLOUR

native soy flour



Native soy flour is a product of fine grinding of fat-free, non-washed food soybean meal («white petal»).

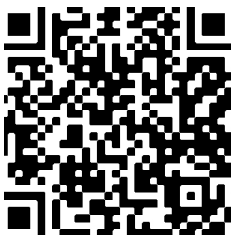
Features and Benefits:

- flour improver and bleach that replaces or reduces the consumption of similar ingredients of a chemical nature
- improves the characteristics of the dough: firmness, crust color
- made from Russian soybeans, does not contain GMO
- fine flour 100-200 mesh
- fat content no more than 1-1.2%
- humidity no more than 8-9%
- high protein content - at least 48%

Application:

- crumb bleach in bakery products
- replacement of COM in confectionery products

Learn more about the product



Product characteristics:

Name, trademark	Native soy flour
Organoleptic characteristics:	
- type, shape, and size of particles	fine flour 100-200 mesh, white to light yellow
- color, smell, taste	deodorized flour
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	10,0
- weight fraction of protein,%, not less	50,0
- weight fraction of fat,%, not less	1,2
- weight fraction of carbohydrates,%, not less	32,0
- weight fraction of cellulose,%, not less	2,3



TEXTURED FLOUR

Textured flour



WHEAT TEXTURED FLOUR

PROTEX-A 10/2 HP

wheat texturate with increased moisture-binding capacity, which improves the plasticity of the dough

Protex-A 10/2 HP is a wheat texturate, a functional ingredient with the feature of swelling in cold water for use in wheat and rye-wheat breads, bakery products, and also used as a component of streusel crumbs or filler for confectionery products.

Features and Benefits:

- due to high moisture-binding capacity (1:4) it is used in multifunctional mixtures for confectionery and semi-finished products
- increases the output of finished products due to increased moisture-binding capacity
- retains functionality at high temperatures
- when used in streusel crumbs, retains a crispy effect for several days (depending on storage conditions and packing)
- creates the effect of a higher product, in comparison with the control a new model
- reduces crumbling of bakery products
- creates uniform porosity
- allows you to create products with light crumb rubber
- the presence in the heat-treated flour of cold swelling more than large fractions increases its water absorption capacity, which makes it possible to increase the yield of finished products

Learn more about the product



Application:

- wheat and rye-wheat breads
- assorted bakery products
- as a component of streusel crumb for bakery products
- filler for confectionery products

Product characteristics:

Name, trade mark	Textured wheat flour Protex-A 10/2 HP
Organoleptic characteristics:	
- type, shape and size of particles	fine flour -70% of 20 mesh particles (0.1-1.0mm)
- color, smell, taste	from white to light cream with shades inherent in the original raw materials
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	12,0
- weight fraction of protein, % not less	9,0
- weight fraction of fat, %, no more	1,8
Functional properties:	
- degree of hydration	1:4
- influence on the rheology of food systems	viscosity regulator

Textured flour



WHEAT TEXTURED PROTEX-A 3D

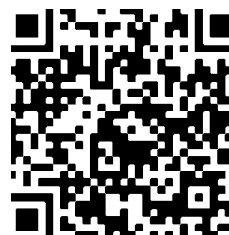
whole wheat flour «3D» shortens the technological process of making bread and increases the profitability of production

Protex-A 3D is a textured whole grain wheat flour that avoids fermentation of sourdough and dough, significantly reducing the time for making bread.

Features and Benefits:

- reduction of the technological process by 2.5 hours on rye bread and by 1.5 hours on wheat
- no fermentation and proofing required for the development of porosity due to gas bubbles
- when using the product, the dough holds its shape better
- the possibility of obtaining a volumetric-structured product from flour of any baking quality without loss properties of the framework and «source» of pores
- increase in product yield
- elimination of crumb loss in cut products
- the possibility of obtaining a volumetric-structured product duct from any raw material (vegetable protein, whole grains flour, with additives, etc.)
- due to more complete gelatinization of starch and denaturation protein - better attacked by enzymes

Learn more about the product



Application:

- bread and bakery products
- flour confectionery
- pizza crust
- high-protein and fiber-enriched bread healthy lifestyle / premium segment

Product characteristics:

Name, trade mark	Wheat texturate Protex-A 3D
Organoleptic characteristics:	
- type, shape and size of particles	volumetric textured product whole grain of wheat, texture size from 2 - 5mm, rounded.
- color, smell, taste	from white to light cream with shades inherent in the original raw materials
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	10,0
- weight fraction of protein,% not less	10,0
- weight fraction of fat,%, no more	1,0
Functional properties:	
- degree of hydration	1:3-4



STARCH



WHEAT STARCH AMILON

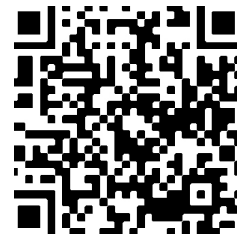
wheat starch with increased functionality

Amilon starch is a natural wheat starch with improved functionality relative to traditional starches.

Features and Benefits:

- does not have an E-index, it is marked on the label as «wheat flour» / «wheat starch»
- makes it easier to work with shortbread dough, increasing its plasticity and improving the structure of the final product
- in biscuit rolls gives a significant increase in volume, preserving the fine-pored structure of the product, increases the shelf life of the biscuit roll and improves the taste, increases the output of finished products, reduces crumbling when cutting
- in sugar biscuits it allows to create a layered structure and gives crispness to the biscuit, creates a beautiful and clear pattern on the surface, allows to achieve slow wetting, reduces biscuit brittleness
- recommended for introduction into children's cookies by the Scientific Research Institute of KP, as it allows to achieve slow wetting
- allows to increase friability while maintaining the structure of the liver, reducing the use of fat
- reduces the brittleness of biscuits and waffle sheets, reducing losses
- when used, there is an increase in the freshness of products on average for 2 days even without the use of enzymes
- higher water-holding capacity and lower slope resistance to retrogradation improve the quality characteristics of products and ensure their stability during the shelf life of products, as well as slow down the processes of staling

Learn more about the product



Application:

It does not require a change in technology and is easily integrated into existing recipes. Up to 10% by weight of flour or according to the recipe of products:

- bakery products
- flour confectionery products (biscuits, including baby biscuits, waffles, biscuits)
- recommended for use in children's biscuits of the Research and Development Center of Bakery Product Manufacturing Industry

Product characteristics:

Name, trade mark	Classified Wheat Starch Amilon
Organoleptic characteristics:	
- type, shape and size of particles	fine grinding - 90% no more than 400 mesh
- color, smell, taste	white, free of foreign taste and smell
Physical and chemical indicators:	
- weight fraction of moisture, %, no more	9,0
- weight fraction of protein, % not less	8,0
- weight fraction of fat, %, no more	1,0
- weight fraction of starch, %, not less	85,0



NATURAL FLOUR AND DOUGH IMPROVERS



NATURAL FLOUR AND DOUGH IMPROVER PROTELON 22

high-protein wheat flour - a natural flour and dough improver

Protelon 22 is a high-protein wheat flour that stabilizes flour quality with low gluten, improves dough rheology and slows down staling.

Features and Benefits:

- stabilizes the quality of flour with low gluten
- improves the rheology of the dough: gives high stability to the dough, it softens and tears less, becomes more elastic
- increases uniform porosity and specific volume of final products
- slows down staling, increases crumb softness
- reduces the brittleness of the dough of frozen semi-finished products
- high protein content of at least 22%
- mass fraction of raw gluten - about 55% (the quality of gluten is us - I group)
- made from Russian wheat, non-GMO
- has no E-index, is marked on the label as «wheat flour»
- easy to use (stirring)
- efficiency is confirmed, the product is recommended for implementation SRI KhP



Learn more about the product



Application:

- bakery and flour confectionery
- dough for frozen semi-finished products
- pasta
- base for pizza
- sheets for lasagna

Product characteristics:

Name, trade mark	Wheat flour high-protein «Protelon» brand 22 (native)
Organoleptic characteristics:	
- type, shape and size of particles	fine flour - not less than 90% of particles larger than 400 mesh (<38 microns)
- color, smell, taste	fine, white free-flowing powder, neutral
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	8,0
- weight fraction of protein,% not less	22,0
- weight fraction of crude gluten,%, not less	54-60
- quality of gluten on the device IDK-3M, units	60-70



NATURAL FLOUR AND DOUGH IMPROVER PROTEx-A 10/1 KL

cold swelling wheat flour

Protex-A 10/1 KL is a cold-swelling flour that reduces product moisture loss and increases freshness.

Features and Benefits:

- swelling effect in cold water
- degree of hydration - 1: 3-10
- allows to obtain elastic, dry to the touch dough with good consistency: the dough is perfectly processed, improves the shape and appearance of finished products
- reduces moisture loss: products do not dry out longer
- increases the freshness of the product by 48 hours
- increases the output of finished products
- increases the porosity of the product and the elasticity of the crumb
- allows you to achieve a softer texture, create a more moist and saturated internal structure of products
- has no E-index, is marked on the label as «wheat flour»
- cheaper than analogues of Russian and foreign competitors

Learn more about the product



Application:

- partially or completely instead of a part of wheat bakery flour in the used confectionery recipe
- for muffin 7.0 - 8.0%
- for custard products 5.0 - 10.0%
- as a thickener and stabilizer in various fillings

Product characteristics:

Name, trade mark	Textured wheat flour based on starch-containing raw materials «Protex A» 10/1 KL
Organoleptic characteristics:	
- type, shape and size of particles	fine flour - 90% of particles with a size of 149-74 microns (100-200 mesh)
- color, smell, taste	from white to light cream with shades, without foreign tastes and odors
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	12,0
- weight fraction of protein, % not less	9,0
- weight fraction of fat, %, no more	1,2
Functional properties:	
- degree of hydration	1:3-10



IMPROVER FOR PUFF PASTRY BONNFARIN

complex food additive that improves puff pastry



Flour improver Bonnfarin for puff pastry is a functional mixture used in the production of puff pastry (chilled or frozen, yeast and yeast-free) and products made from it, bakery products, small-piece muffins.

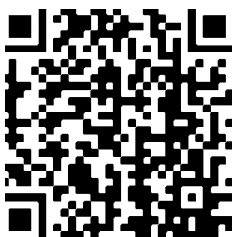
Features and Benefits:

- increases the plasticity of the dough and facilitates the process of rolling and lamination
- increases the stability of dough pieces during defrosting (defrosting)
- improves the volume and layering of baked puff products
- prolongs the shelf life of products
- provides delicate taste and crispness of puff products
- increases the absorption of moisture during mixing, depending on the formulation used, which guarantees economic benefits

Application:

- products from chilled or frozen puff pastry (yeast and yeast-free) and products from it, bakery products (small-piece muffins)

Learn more about the product



Product characteristics:

Name, trade mark	Bonnfarin
Organoleptic characteristics:	
- type, shape and size of particles	particle size, residue on a 100 mesh sieve (149 microns) not more than 10.0%. Loose powdery mass
- color, smell, taste	from white in various shades to light yellow or light beige, neutral
Physical and chemical indicators:	
- weight fraction of moisture, %, no more	12,0



VEGETABLE FIBERS



SOY FIBER PROTOCELL

soy dietary fiber



ProtoCell is a protopectin-type soybean fiber that is high in fiber.

Features and Benefits:

- high water-holding capacity - 1: 8-10
- possesses emulsifying properties
- improves rheology, increases density, elasticity and adhesion
- provides stability during heat treatment, in the cycle of freezing-defrosting and during storage of finished products

Application:

- as an emulsifier in fruit, berry and fat fillings
- as a filling stabilizer in wafer products

Learn more about the product



Product characteristics:

Name, trade mark	Soy vegetable fiber ProtoCell
Organoleptic characteristics:	
- type, shape and size of particles	powder of light yellow color with a cream shade
- color, smell, taste	free of foreign tastes and odors
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	8,5
- weight fraction of protein, % not less	18,5
- weight fraction of fat, %, no more	0,45
Functional properties:	
- degree of hydration	1:8-10



VEGETABLE FIBER

PROTOCELL FW 200/1, FW200/2

vegetable fiber with increased functionality



Protocell FW 200/1, FW 200/2 are vegetable dietary fibers with increased moisture-binding capacity.

Features and Benefits:

- improves rheology, increases density, elasticity and adhesion
- possesses emulsifying properties
- provides stability during heat treatment, in the cycle of freezing-defrosting and during storage of finished products
- high moisture binding capacity - 1:15 for Protocell FW 200/1

Application:

- fruit and berry and fat fillings

Learn more about the product



Product characteristics:

Name, trade mark	Vegetable fibers Protocell FW 200/1, 200/2
Organoleptic characteristics:	
- type, shape and size of particles	fine fibrous powder
- color, smell, taste	white, without foreign tastes and odors
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	9,0
- weight fraction of protein, % not less	0,9
- weight fraction of fiber, % not less	85,5
Functional properties:	
- degree of hydration	1:15
- viscosity, cP (5% solution, cold), not less	2100



WHEAT FIBER BIOCELL

wheat dietary fiber

Biocell is wheat dietary fiber with varying degrees of fiber and fineness.

Features and Benefits:

- improves rheology, increases density, elasticity and adhesion
- provides stability during heat treatment, in the freeze-thaw cycle and during storage of finished products
- has a high moisture-binding and fat-binding ability
- increases the moisture content in dough and finished products due to moisture-holding properties, thereby preserving the freshness of the baked products for a longer time
- various fractions - 35, 90 (powder), 200, 500 (bulk density)
- moisture binding capacity 1: 4-9



Application:

- butter and oatmeal cookies
- wafer products
- gingerbread
- fruit and berry fillings

Learn more about the product



Product characteristics:

Name, trade mark	Vegetable fibers Biocell XL
Organoleptic characteristics:	
- type, shape and size of particles	lumpy powder of various flowability
- color, smell, taste	from white to light beige, without foreign tastes and odors
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	9,0
- weight fraction of protein, % not less	1,0
- dietary fiber content, % not less	96,0
Functional properties:	
- degree of hydration	1:4-10



PLANT CONCENTRATES



PEA PROTEIN CONCENTRATE

PROTELON 55/1

native pea protein concentrate with 55% protein content and high emulsifying ability

Vegetable protein concentrate Protelon 55/1 is a native pea protein concentrate used for partial or complete replacement of egg albumin, with a high foaming and emulsifying capacity, used to create protein masses, creams, protein-whipped masses.

Features and Benefits:

- hypoallergenic, gluten and soy free
- possesses emulsifying properties and can serve as eggs substitute in vegan and lean foods, depending on the recipe can be considered as 100% egg replacement
- unlike eggs, it does not lead to salmonellosis in production
- successfully replaces eggs in cookies, cakes, muffins or waffles
- made from Russian yellow peas, non-GMO
- protein content - 55%



Application:

- protein and national breads, pastries
- test confectionery products for healthy lifestyle
- protein bars
- partial or complete replacement of egg products in product recipes

Learn more about the product



Product characteristics:

Name, trade mark	Vegetable protein concentrate «Protelon 55/1» pea
Organoleptic characteristics:	
- type, shape and size of particles	native fine pea flour
- color, smell, taste	from pale to yellow-brown, without foreign tastes and odors
Physical and chemical indicators:	
- weight fraction of moisture,%, no more	12,0
- weight fraction of protein, % not less	55,0
- weight fraction of fat, %, no more	4,0
Functional properties:	
- degree of hydration	1:2-4



CARRAGEENANS

Carrageenans



SEMI-REFINED KAPPA-CARRAGEENAN E407A

semi-refined kappa carrageenan



Carrageenan E407a is a semi-refined kappa-carrageenan, a product of seaweed processing.

Features and Benefits:

- has the function of a thickener, gelling agent and emulsifier
- completely natural product
- gel strength (g) - water 1.5%, 20C, minimum 40; 1% + 0.2% KCl (20C) minimum 200
- viscosity - 20 (1.5%, 75C)

Application:

- bread, pastries, fillings, creams, desserts - 0.1-0.2% in the recipe of products

Learn more about the product



Product characteristics:

Name, E-index	Kappa-carrageenan (half-raf., N / a) 407a
Composition	p/o polysaccharide extract
Appearance	light brown powder
Taste, smell	neutral, light, algae
Mass fraction of moisture, %, no more	max 12,0
pH	8-11 (1% p-p, 25°C)
Viscosity min, cps	20 (1,5%, 75°C)
Gel strength, g	
- aqueous 1.5%, 20 ° C	min 40
- 1% + 0.2% KCl, 20 ° C	min 200



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