



BUNGE®

PurePro®

Plant Protein Portfolio



Soy Protein Ingredients

PurePro® helps you create irresistibly craveable foods that deliver superior nutrition – sustainably. Our portfolio of soy proteins are available in a range of textured and powdered formats delivering 50% to 90% protein on a dry basis across flours, concentrates, and isolates.



Textures

~50% – 70% protein*



Powders

~70% – 90% protein*



Ultra-Clean Tasting

Elevate Deliciousness

Sustainably Crafted

Reduce CO₂e Footprint

Nutritionally Advanced

Maximize Nutrition Claims

*Dry basis



Soy Protein Portfolio – Flours, Concentrates, Isolates

PurePro®				
Flours	Concentrates			Isolates
~50% Protein*	~70% Protein*			~90% Protein*
Textured	Textured	Nutritional	Functional	Powdered
				
	Response®	Procon®	Alpha®	

*Dry basis

CONSIDERATIONS

- Conventional
- Non-GMO (IP)
- Kosher & halal
- Diverse product range
- Sustainably made
- Produced at scale



Textured Soy Flours

~50% PROTEIN*

	Large Granule	Small Granule	Large Flake	Small Flake
	5.4 mm 5/16 inch	2.0 mm 1/8 inch	2.3 mm 1/4 inch	1.8 mm 1/8 inch
				
PurePro	Soy 50T - Granule 450	Soy 50T - Granule 250	Soy 50T - Flake 450	Soy 50T - Flake 250

*Dry basis

PRODUCT DETAILS

CONVENTIONAL

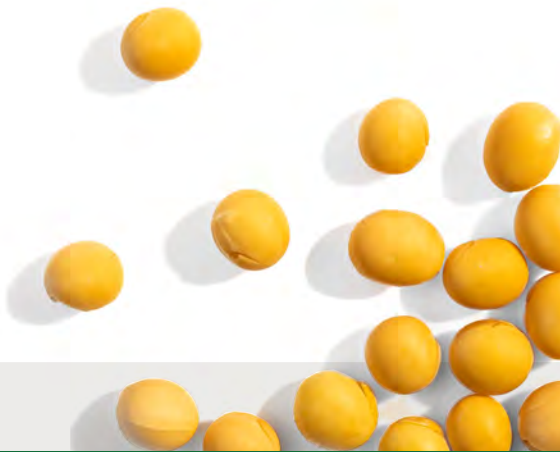
NON-GMO (IP)

KOSHER & HALAL

CARAMEL COLORING
CLASS 1 & 3 AVAILABLE

VITAMIN & MINERAL
FORTIFICATION AVAILABLE

BAGS: 25lbs / 11.34kg



Textured Soy Protein Concentrates

~70% PROTEIN*

	Crumble	Granule	Large Flake	Small Flake
	5.0 mm 1/4 Inch	3.0 mm 1/4 Inch	4.0 mm 1/4 Inch	2.0 mm 1/8 Inch
				
PurePro	Soy 70T - Crumble 550	Soy 70T - Granule 300†	Soy 70T - Flake 400†	Soy 70T - Flake 200†
Response	4310†	4380**	4400 **	4410 **

*Dry basis

PRODUCT DETAILS

CONVENTIONAL

NON-GMO (IP)

KOSHER & HALAL

CARAMEL COLORING
CLASS 1 & 3 AVAILABLE

VITAMIN & MINERAL
FORTIFICATION AVAILABLE

BAGS: 25lbs / 11.34kg



**Soy 70T Crumble 550 and 4310 are not matches. Both are crumbles with different sizes and distribution profiles.
†Matches.

Nutritional Soy Protein Concentrates

~70% PROTEIN*

	Very Fine	Fine	Semi-Coarse	Coarse
	Mesh #200	Mesh #120	Mesh #80	Mesh #60
				
PurePro	Soy 70N-V50	Soy 70N-50	Soy 70N-IC50	Soy 70N-C50
Procon	-	2000	-	20/60

*Dry basis

PRODUCT DETAILS

CONVENTIONAL

NON-GMO (IP)

KOSHER & HALAL

BAGS:

50lbs / 22.68kg

20kg

25kg

SUPERSACK:

2,000lbs

1,000kg

BULK



Alpha Functional Soy Protein Concentrates

~70% PROTEIN*

Alpha Gelling Line

HIGH GELLING & EMULSIFYING



Alpha 11, Alpha 12, Alpha 10, Alpha 8

Hot dogs, sausages, deli, formed grounds, HME

Alpha Dispersing Line

HIGH DISPERSIBILITY



Alpha DS, DSP, DSM, Soyarich B, HVF 39

Meat injection, marinades, beverages

ALPHA CONSIDERATIONS

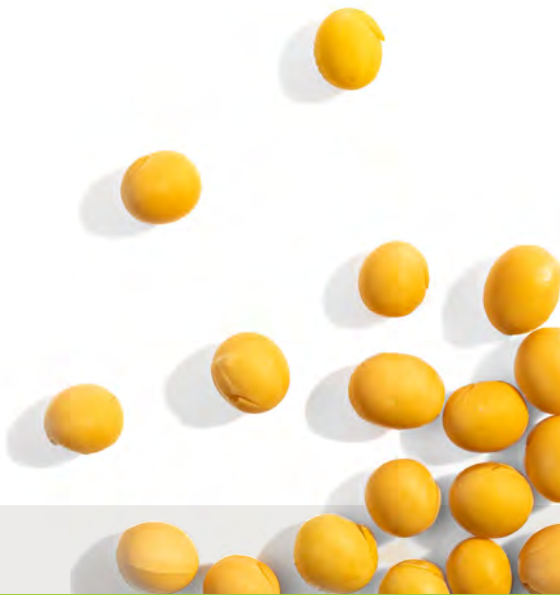
CONVENTIONAL

NON-GMO (IP)

KOSHER & HALAL

VITAMIN & MINERAL
FORTIFICATION AVAILABLE

BAGS: 20kg



*Dry basis

Alpha Gelling Line Range of Functionalities

~70% PROTEIN*

	Alpha 11	Alpha 12	Alpha 10	Alpha 8
	Mesh #100	Mesh #100	Mesh #100	Mesh #100
				
Gelling	●	●	●	●
Emulsifying	●	●	●	●
Viscosity	●	○	○	○

●

 Very High

●

 High

○

 Medium

○

 Low

CONSIDERATIONS

GELLING

- 1:4 protein : water

EMULSIFYING

- 1:4:4 protein : oil : water

VISCOSITY

- Spindle 3, 10%

BAGS: 20kg



*Dry basis

Alpha Dispersing Line Supports Meats, Drinks, Soups, More

~70% PROTEIN*

	Alpha DS [†]	Alpha DSP	Soyarich B	HVF 39
	Mesh #100	Mesh #100	Mesh #230	Mesh #100
				
Application	Beef, Pork	Poultry	Beverage	Soups
	Injection	Injection	Ready-to-Drink	Sauces
	Marinade	Marinade	Dry Blended Beverage	Dressings

*Dry basis

CONSIDERATIONS

ALPHA DS

- Low viscosity
- Vitamin/mineral

ALPHA DSP

- Low viscosity

SOYARICH B

- Low viscosity

HVF 39

- Low viscosity
- Hydrolyzed

BAGS: 20kg



[†]Includes DSM.

Soy Protein Isolates

~90% PROTEIN*

	Nutritional	Soluble	Dispersible	Extra Dispersible	Gelling	Extra Gelling
						
PurePro	Soy 90N	Soy 90S	Soy 90F-D	Soy 90F-DX	Soy 90F-G	Soy 90F-GX

*Dry basis

PRODUCT DETAILS

NON-GMO (IP)

KOSHER & HALAL

BAGS: 20kg



Operational Footprint

A dynamic footprint that enables supply resiliency



Facility		Concentrates			Flours
Location		Textured (TSPC)	Functional (SPC)	Standard (SPC)	Textured (TSF)
● Morristown, IN		●		●	●
● Bellevue, OH		●		●	
● Gibson City, IL		●		●	
● Remington, IN			●		

○ Additional warehousing
(Europe warehouse in Breda, Netherlands)



*Soy protein concentrates and soy flours are produced in the United States.

†Soy protein isolates are produced in China.

Operational Footprint – Morristown

America's newest soy protein production facility in over 40 years



[Click image to play video](#)

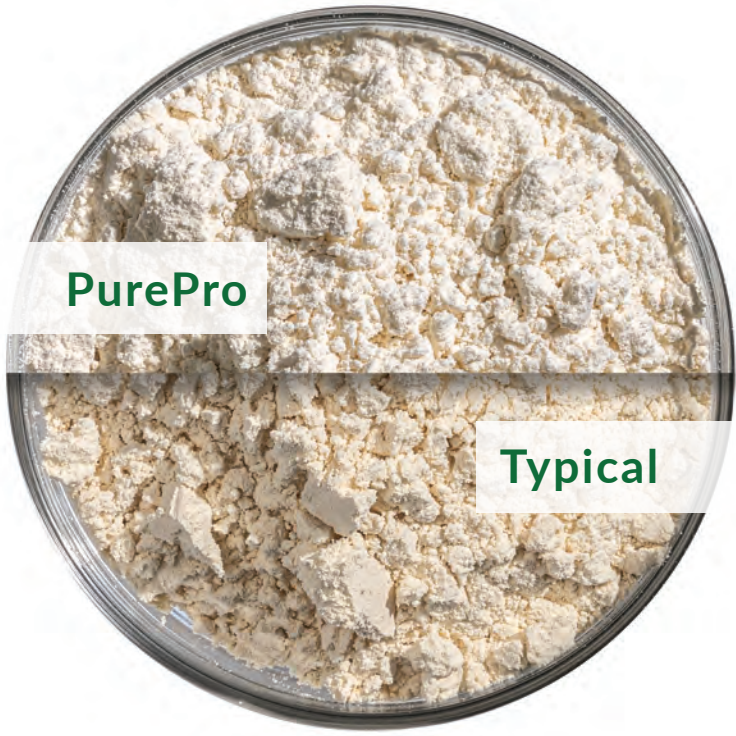


Elevate Deliciousness – Morristown

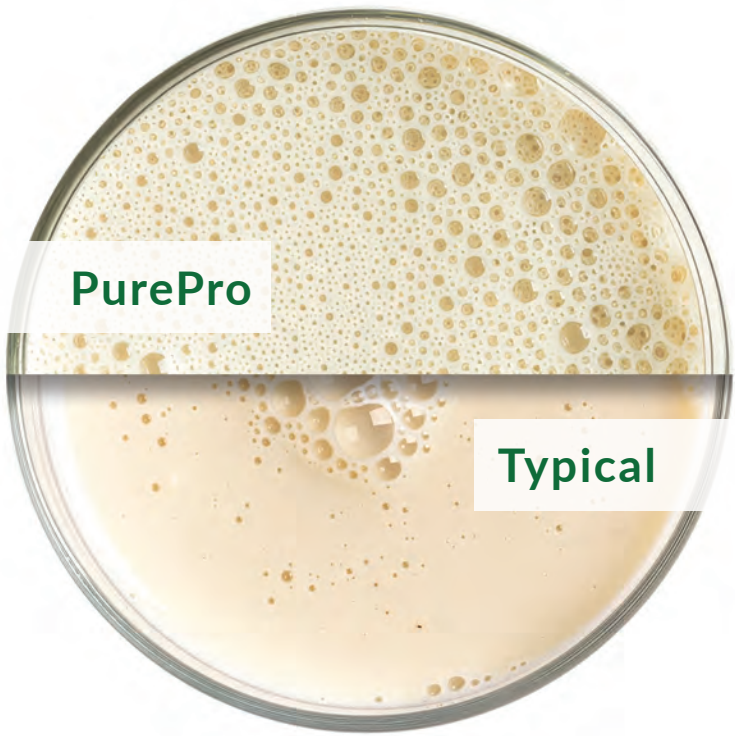
Better Soybeans



Better Proteins



Better Foods & Drinks



Elevate Deliciousness – Morristown

Morristown produces ultra-clean tasting protein

Creating ultra-Clean tasting protein at Morristown

Select Soybeans

Eliminate green, broken, fermented soybeans



BAD BEANS HAVE OFF-FLAVORS

HULLS HAVE OFF-FLAVORS

OIL & SUGAR HAVE OFF-FLAVORS

THE PUREPRO DIFFERENCE

- Ultra clean taste
- Very light color
- High-purity protein
- ~70% protein
- ~17% fiber
- Produced in scale



Elevate Deliciousness – Morristown

Morristown’s process to create ultra-clean tasting protein efficiently



Premium Selection

- GRADING
- BAD BEAN REMOVAL



Extra Cleaning

- EXTRA ASPIRATION
- MAXIMUM DEHULLING



Ultra Purifying



- MAXIMUM SUGAR EXTRACTION
- MAXIMUM OIL EXTRACTION



High-Yield Extraction

- USE MORE OF THE BEAN
- SPECIALIZED EXTRACTION

Reduce Your CO₂e Footprint – Morristown

Soy proteins from Morristown have a low CO₂e footprint

Our pathways to create low CO₂e soy protein

Soybeans FROM REGENERATIVE AGRICULTURE



Click image to play video

- Minimum Tillage
- Cover Crops
- Nutrient Management
- Crop Rotation

Production THAT'S ENERGY EFFICIENT



Click image to play video

- Optimized Energy Use
- Proprietary Processes
- Advanced Productivity
- CO₂e Neutral Electricity Option

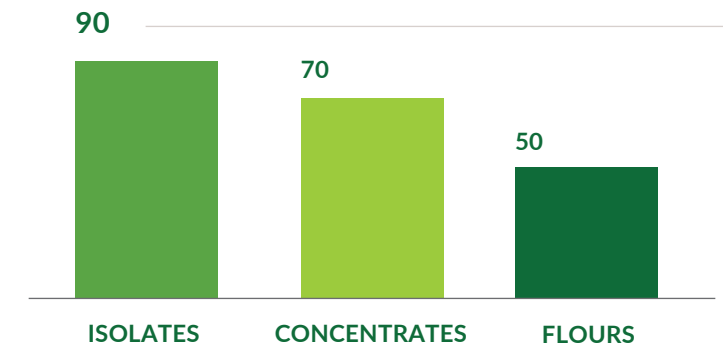
Maximize Protein Claims

Soy protein is nutritionally advanced



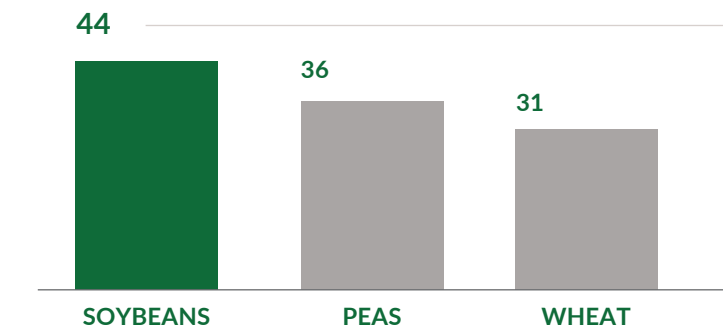
Protein Content

Soy proteins range in protein content from 50% to 90% dry basis (USDA).



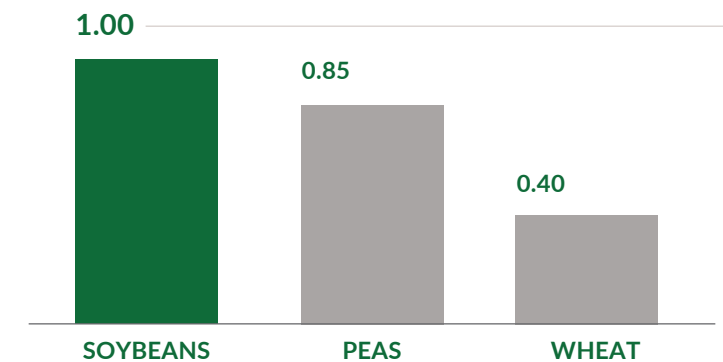
Essential Amino Acids

Soy has the highest content and the most complete profile of essential amino acids among the common plant proteins (USDA).



Protein Digestibility

Soy has the highest PDCAAS among the most common plant proteins.



R&D Capabilities

Expertise and technologies accelerate new product development



Bench Top



CONCEPTS



BENCH SCALE



CULINARY KITCHEN

Sensory & Analytics



SENSORY TESTING



FUNCTIONAL ANALYSIS



ANALYTICAL TESTING

Extrusion Lines



SHORT BARREL SINGLE



DRY EXTRUSION



WET EXTRUSION

Pilot Plants



MEAT & ALT MEAT



BEVERAGE



BAKERY

BENCH TOP

Concepts, mixing, forming, grilling, frying stove top

SENSORY & ANALYTICS

Digital, trained/consumer tests, full scale analytics

PILOT PLANTS

Meat, dairy, beverage, bakery, snack; dry & wet extruders



Application Opportunities

Our powdered and textured proteins help you create delicious, nutritious, and sustainable foods, beverages, nutritional products, and supplements across a range of key market segments.

Meat



- Burgers
- Sausages
- Nuggets
- Whole Muscle
- Meat Loaf
- Emulsified

Meat Snacks



- Sticks
- Jerky
- Bites

Plant-Based Meat



- Grounds
- Whole Muscle
- Emulsified
- Snacks

Bakery



- Waffles
- Pancakes
- Muffins
- Pizza Crust
- Breads

Snacks



- Extruded Puffs
- Tortilla Chips
- Crackers
- Cookies
- Sweet Biscuits
- Sports Bars
- Granola Bars

Beverages



- Ready-to-drink
- Ready-to-mix
- Coffee-based

Appendix



Alpha Gelling Line vs. Soy Protein Isolate Performance

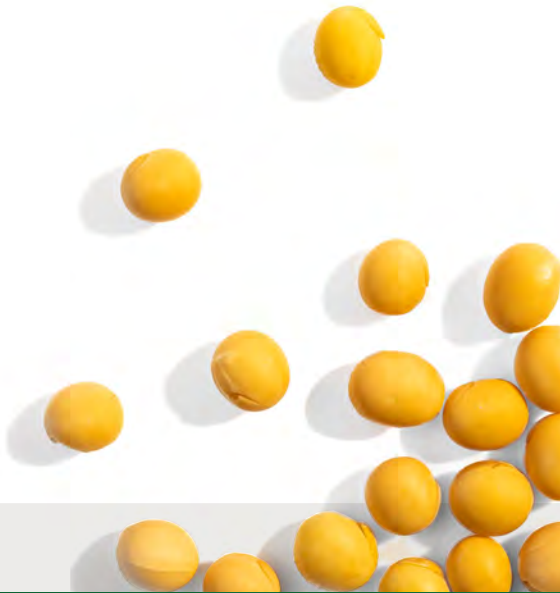
Alpha gelling line can replace soy protein isolate for gelling and emulsifying

Alpha 11		Soy Protein Isolate	
Gel	Emulsion	Gel	Emulsion
			
1:4 Protein : Water	1:4:4 Protein : Water : Oil	1:4 Protein : Water	1:4:4 Protein : Water : Oil

CONSIDERATIONS

ALPHA RANGE

- Great substitute for isolate
- Alpha 11 used as an example
- Evaluate multiple Alphas for match



Alpha Gelling Line vs. Soy Protein Isolate Performance

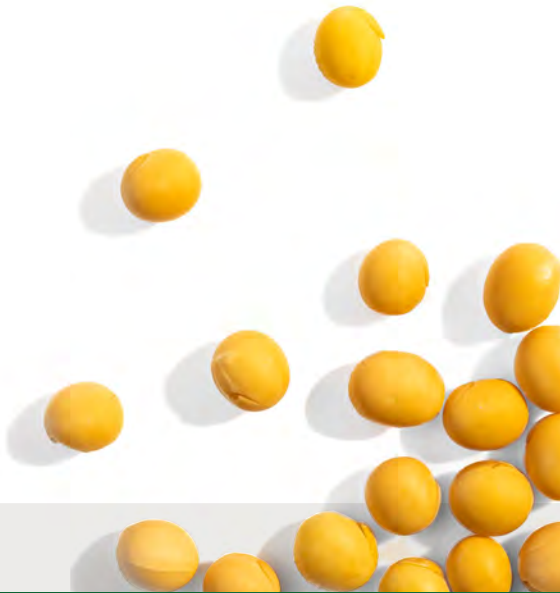
Alpha gelling line can replace soy protein isolate in hot dogs delivering texture benefits

Alpha 11		Soy Protein Isolate	
			
			

CONSIDERATIONS

HOT DOG FORMULA

- 4% protein usage level
- Great substitute for competitor
- Alpha 11 used as an example
- Evaluate multiple Alphas for match





PurePro[®]

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