

Specification NaProLup P56-H125

Lupin Protein-Nutritional Fibre Premium Compound

article no. :	202 696
packaging:	paper bag composite including polyethylene in-liner, 20 kg net
storage condition:	< 30 °C at < 70 % rel. humidity
shelf life:	15 month from approval date under the mentioned storage condition

Parameter	Specification
Basic Data	
powder bulk density	appr. 600 g/l
particles size	max. 2 % ">280 microns"; max. 15 % "> 125 microns"
water	6 % +/- 1 %
ash	< 4 %
total proteins (N * 6,25) in dm	> 54 %
nutritional fibre (from the kernel) in dm	ca. 20 %
total lipids in dm	12 % +/- 2 %
nitrogen solubility index (NSI) at pH 6,8	ca. 40 %
pH (10 % dispersion)	7,0 +/- 0,2
Microbiological Counts:	
total count (cfu/g)	< 5.000
yeasts (cfu/g)	< 50
moulds (cfu/g)	< 50
enterobacteriaceae (cfu/g)	<=10
salmonella	not detectable in 25 grams
Specific Constituents and Antinutritiva:	
total alcaloids	<< 50 ppm
gluten	bulk ware < 200 ppm ("gluten-free"-product on request)
lactose (detection limit: 200 ppm)	below detection limit
phytic acid	negative
Techno-functionalities	
water binding capacity (100 parts of water plus 5 parts of P56: 85 °C for 2 min)	appr. 3,5 ml/g
oil (fat) binding capacity (oil : P56 = 100 : 15 parts)	appr. 3,0 ml/g
emulsifying capacity (water : P56 = 100 : 1 parts, 20 °C, pH 7)	550 to 600 ml of oil per liter

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parameter	specification			
Sensory Properties				
colour	pale yellow			
smell	almost neutral			
taste	discreet-slight, lupin characteristic			
Nutritional Properties				
caloric value	appr. 13 kJ/g			
nutritional value analysis	amino acid	g/16g N	fatty acid	%
	arginine	12,4	14:0	traces
	cysteine	1,3	16:0	7,7
	histidine	1,72	16:1	0,3
	isoleucine	3,72	18:0	1,1
	leucine	6,06	18:1	51,0
	lysine	4,2	18:2	17,3
	methionine	0,65	18:3	11,1
	phenylalanine	3,27	20:1	n.a.
	threonine	3,13	20:3	1,0
	tryptophan	0,97	20:4	0,4
	tyrosine	5,09	22:0	3,3
	valine	3,64	22:1	2,5
			24:0	traces

Characteristics:

De-sugared and carefully concentrated lupin protein preparation from a special protein-rich lupin variety, including the natural content of the nutritional lupin kernel fibre.

NaProLup P56-H125 acts as a fat emulsifier as well as a water binder, supports gas retention in dough and pastries. Due to its content of hydrophilic nutritional fibres P56-H125 acts as a humectant or food tending towards drying out or un-desired crust formation. Especially starch retrogradation will be slowed down by adding P56-H125. When dispersed in water P56-H125 causes homogenous, doughy dispersion and weak gel formation at higher concentration. The product counteracts with high molecular hydro-carbons (e.g. hydro-colloids) which improves water binding, structural viscosity and gel formation. P56-H125 has a fine powder structure with defined particle size distribution (80 % < 125 microns).

Labelling (recommendation):

NaProLup P56-H125 is a **food ingredient** and not an additive (no "E"-code).

We recommend you to use the term "**lupin protein**" for proper description of this product in the ingredients list and, at the same time, in order to name the origin of this product which will be helpful for consumers with potential sensitivity against lupin constituents.