

Specification NaProLup P52-H125

Lupin Protein-Nutritional Fibre-Compound

article no. : 202 576
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 micron"; max. 15 % ">125 micron"
water	6 % +/- 1 %
ash	< 4 %
total proteins (N * 6,25) in dm	> 46 %
nutritional fibre (from the kernel) in dm	max. 32 %
total lipids in dm	6 % +/- 1 %
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	standard P52 < 200 ppm ("gluten-free"-type on request)
lactose (detection limit: 200 ppm)	below detection limit
phytic acid	negative
Techno-functionalities	
water binding capacity (100 aliquot parts of water plus 5 parts of P52: 85 °C for 2 min)	appr. 4 ml/g
oil (fat) binding capacity (oil : P52 = 100 : 15 aliquot parts)	appr. 2 ml/g
emulsifying capacity (water : P52 = 100 : 1 aliquot parts, 20 °C, pH 7)	480 to 500 ml of oil per liter

continued on page 2

Parameter	Specification			
Sensory Properties				
colour	pale yellow, slightly caramel			
smell	almost neutral, slightly toasty			
taste	discreet-slight, lupin characteristic			
Nutritional Properties				
caloric value	appr. 10 kJ/g			
nutritional value analysis	amino acid	g/16g N	fatty acid	%
	arginine	12,0	14:0	traces
	cysteine	1,48	16:0	10,3
	histidine	2,41	16:1	traces
	isoleucine	3,97	18:0	4,8
	leucine	6,61	18:1	34,9
	lysine	4,66	18:2	37,0
	methionine	0,72	18:3	6,2
	phenylalanine	3,65	20:1	0,3
	threonine	3,36	20:3	0,7
	tryptophan	1,06	20:4	traces
	tyrosine	3,46	22:0	1,3
	valine	3,91	22:1	traces
			24:0	traces

Characteristics:

De-sugared and carefully concentrated lupin protein preparation including the natural content of the nutritional fibre of the lupin kernel.

NaProLup P52-H125 acts as a fat emulsifier as well as a water binder, structural viscosity formation when dispersed in water, 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. P52- H125 shows a strong surface-adhesiveness and can therefore be applied as a food matrix binder.

Labelling (recommendation):

NaProLup P52-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.