

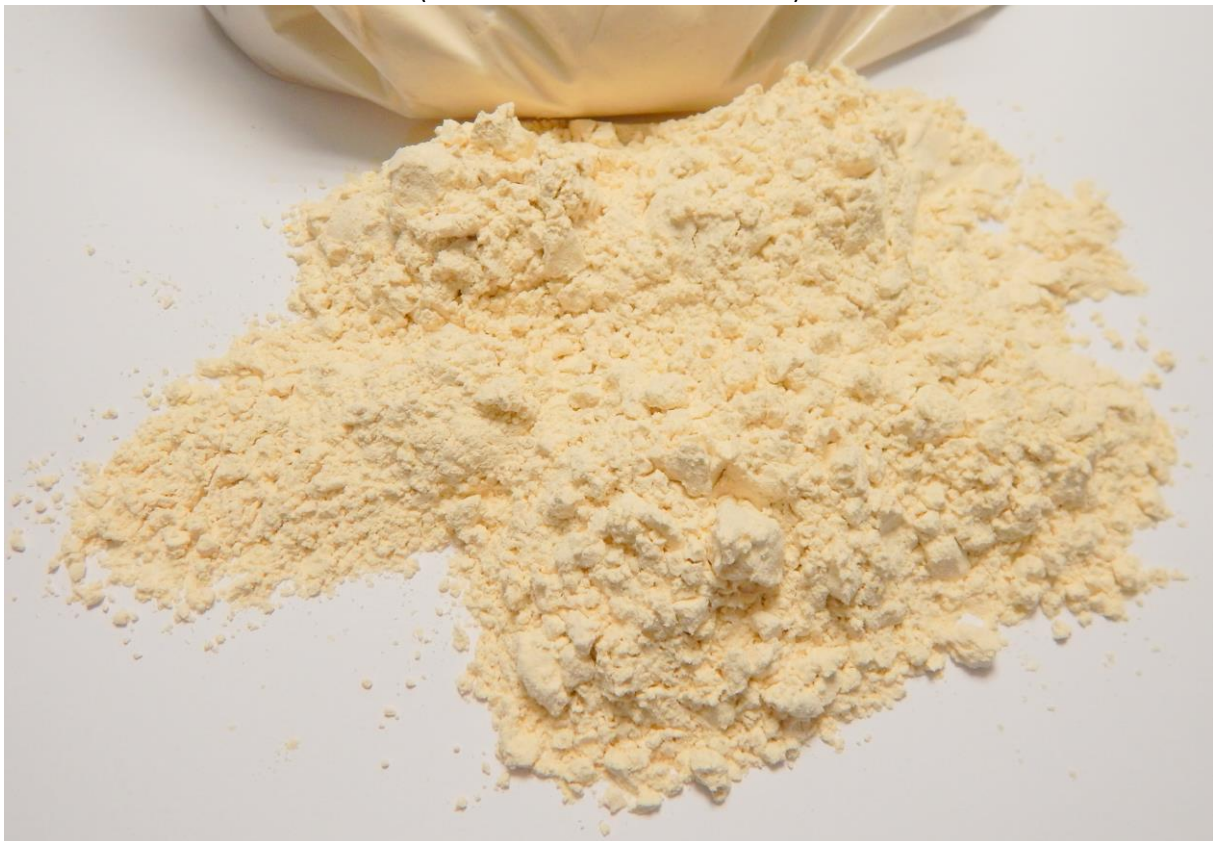


LetCo

LIQUID ENERGY TRADING COMPANY SWISS S.A.

Soybean Protein Concentrates

Fine grade for fattening and rearing veal calves
(Product code: LQS-SBZ18SP75)



Product Quality Specifications

Specifications

		Unit	Analysis method
Protein (dry matter)*	min. 68	%	ISO 5983
Moisture*	max. 8	%	Drying on 105°C
Iron**	max. 120	mg/kg	ICP/MS
Salmonella*	Negative 25	g	ISO 6579
Particle size*	min. 96% <75 micron		Vacuum Alpine screen
Glycinine**	max. 3	mg/kg	TNO Sandwich ELISA
B-conglycinine**	max. 3	mg/kg	TNO Sandwich ELISA
PDI**	min. 5		SRPS E.N8.002
Trypsin inhibitor activity**	max 3,5	mg/g	SRPS EN ISO 14902

Typical composition

Protein	65,0	%
Fat	0,5	%
Fiber	4,5	%
Ash	7,0	%
Moisture	6,0	%
Nitrogen free extract***	17,0	%

*CoA **Periodical Analysis ***Calculated

NON-GMO confirm EC 1829/1830 without GMO labeling: maximum of 0,9% adventitious residual GM DNA

Variation in specified values and color are possible, depending on the raw material quality (soybean)

Packaging and transportation:

Packing: the product is packed and delivered in paper bags 25 kg, big-bags 900 kg or in bulk. Each package is marked and contains information about the quality and quantity identification of the product

Storage conditions: to be stored in a cool and dry place, protected from the outside impacts

Validity of use: 24 months

Granulation	Packing (kg)	Number of bags per pallet	Net weight on the pallet (kg)
min. 96% <75 micron	25	30	750
min. 96% <75 micron	900	1	900
min. 96% <75 micron	In bulk	-	-

Product applications: Fattening and rearing calves

Nutritional Profile

Physical properties

Appearance and color	Natural
Size of particles	min. 96% <75 micron
Bulk density	520 kg/m ³
Wettability and stability in aqueous phase	good

Standard Analysis

		Unit
Protein (dry matter)	68,0	%
Protein (as is)	65,0	%
Moisture	6,0	%
Fat	0,5	%
Linoleic acid (18:2)	0,2	%
Linoleic acid (18:3)	0,03	%
NFE	17,0	%
Ash	7,0	%
Crude fiber	4,5	%

Mycotoxins

		Unit
Aflatoxin (B1 + G1)	< 0,0003	mg/kg
Ochratoxin A	< 0,0008	mg/kg
Zearalenone	< 0,0005	mg/kg
DON	< 0,15	mg/kg
Fumonisin (B1 + B2)	< 3	mg/kg

Minerals

		Unit
Calcium (Ca)	0,4	%
Phosphorus (P)	0,8	%
Sodium (Na)	0,015	%
Potassium (K)	2,0	%
Magnesium (Mg)	0,2	%
Copper (Cu)	8	mg/kg
Zinc (Zn)	20	mg/kg

Antinutritive factors

		Unit
Trypsin Inhibitor Activity	3,5	mg/g
Antigens: Glycinine	< 3	
B-conglycinine	< 3	

Energy

		Unit
Rearing calves M.E.	3705	kcal/kg
Pet M. E.	3315	kcal/kg

Heavy metals

		Unit
Lead (Pb)	0,083	mg/kg
Cadmium (Cd)	0,069	mg/kg
Mercury (Hg)	0,006	mg/kg
Arsenic (As)	0,018	mg/kg
Antimony (Sb)	0,038	mg/kg
Selenium (Se)	0,2	mg/kg
Molybdenum (Mo)	2,424	mg/kg

Vitamins

		Unit
Thiamine (B1)	<1	mg/kg
Riboflavine (B2)	<1	mg/kg
Niacin*	<1	mg/kg
Pyridoxine*	<1	mg/kg
Pantothenic acid*	<1	mg/kg
Folic acid*	<1	mg/kg

*The literature data

Biological Analysis

Salmonella	negative	Per 25g
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Other Analysis

		Unit
pH	6,5	1:10 solution
Presence of starch	Negative	
Carbohydrates (Oligosaccharides)	<0,5	%

Amino Acid Content

	% AA/Protein	%AA/Product
Arginine	6,20	4,03
Alanine	4,21	2,74
Aspartic Acid	10,50	6,83
Cystine	0,95	0,62
Glutamic Acid	19,20	12,48
Glycine	3,91	2,54
Histidine*	2,81	1,83
Isoleucine*	4,95	3,22
Leucine*	7,52	4,89
Lysine*	7,40	4,81
Methionine*	1,12	0,73
Phenylalanine	5,00	3,25
Proline	5,05	3,28
Serine	4,95	3,22
Threonine*	3,90	2,54
Tryptophan*	3,83	2,49
Tyrosine	3,50	2,28
Valine*	5,00	3,25

*Essential Amino Acids

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The producer has developed an Identity Preservation Programme certified by the Switzerland's SGS.

The product is certified as per:

GMP + B2	HACCP	IP NON GMO
ISO 14001	ISO 9001	ISO 22000
OHSAS 18001	Valid-IT	Halal
Kosher		

Liability

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