


Product Description:

Name of the Product	Trademark	Description	Composition
Dried Bovine Hemoglobin Animal Consumption		<p>It is an organic product, obtained from the centrifugation of bovine blood, from slaughterhouses with ante- and post-mortem veterinary inspection (IPSA), collected and processed under strict hygiene conditions and traceability. The hemoglobin is spray dried which guarantees high solubility, preserves the functional and nutritional properties of the product (proteins of high biological value).</p>	Bovine Hemoglobin + Sodium Citrate

Specifications

Sensorial

Parameter	Specification	Method
Physical appearance	Fine dust particles	Visual
Color	Red wine	Visual
Odor	Characteristic	Organoleptic
Flavor	Characteristic	Organoleptic

Physicochemical

Parameter	Specification	Method
Protein(Nx6.25)	Min. 90%	Kjeldahl
Moisture	Max. 8%	Oven 105°C constant weight
Fat	0.02%	Extraction Soxhlet
pH	7-8	pH-meter
Solubility	Min. 95 ± 1 %	Gravimetric (w/w)
Ash	Max 4%	Calcination to 550°C

Microbiological

Parameter	Specification	Method
Aerobic Mesophiles	<10 ⁵ UFC/g	AOAC 990.12
Salmonella (25g)	Absence	MLG 4.05 USDA-FSIS
Total Coliforms	<100 UFC/g	(BAM), 8 th Edition, Chapter 4.
Generic E. Coli	<100 UFC/g	(BAM), 8 th Edition, Chapter 4.

Amino acid (%w/w base on dry matter)

Parameter	Specification	Method
Total Lysine	6.25 %	ESS_3.4.7.219
Arginine	4.63 %	ESS_3.4.7.219
Methionine	1.94 %	ESS_3.4.7.219
Threonine	0.73 %	ESS_3.4.7.219
Leucine	2.84 %	ESS_3.4.7.219
Valine	6.84 %	ESS_3.4.7.219
Histidine	4.97 %	ESS_3.4.7.219
Phenylalanine	2.14 %	ESS_3.4.7.219
Cystine	3.88 %	ESS_3.4.7.219
Tryptophan	2.27 %	ESS_3.4.7.219
Isoleucine	3.83 %	ESS_3.4.7.219
Tyrosine	1.30 %	ESS_3.4.7.219
Glycine	2.52 %	ESS_3.4.7.219
Serine	5.06 %	ESS_3.4.7.219
Proline	3.83 %	ESS_3.4.7.219
Alanine	3.27 %	ESS_3.4.7.219
Aspartic Acid	7.43 %	ESS_3.4.7.219
Glutamic acid	10.3 %	ESS_3.4.7.219

* Analysis performed at Laboratorios Exact Scientific Inc. (USA), 1355 Pacific Place, Suite 101, Ferndale, WA 98248. Phone: (360) 733-1205, Fax: (888) 818-2978. Email: lab@exactscientific.com. Date: 17/1/2018

Nutritional Facts

Parameter	Specification	Method
Metabolizable energy for swine Kcal/kg	3,918 Kcal/kg	Atwater
Metabolizable energy for poultry Kcal/kg	3,385 Kcal/kg	Atwater
Pepsin digestibility	97.10 %	AOAC_971.09

Product application

Application:	<p>Widely used and accepted in the diets of different animal species and in ruminants where local legislation allows it:</p> <ul style="list-style-type: none"> • Pigs: pre-weaning and weaning, dose: 3.0 to 5.0% . Benefits: high digestibility and biological value of its protein, passive protection (enteric effect) linked to the content of immunoglobulin (IgG), which exerts a protective effect on the intestinal mucosa, preventing or reducing infection by E. Coli (diarrhea). • Aquaculture (Fish and crustaceans), dose: 2-7%, it improves the consistency, impermeability / buoyancy and color of the pellet. • Poultry: Food formulation for chicks (broilers and layers) , dose: 0.5-2.5%.
Recommended species:	Poultry, pigs, fish, pets (felines and canines), other animal species and ruminants where the local legislation allows it.
Presentation and Packaging:	Screen-printed virgin polypropylene bags with polyethylene inner bag/lining. Net weight: 25kg
Distribution system:	It is transported in closed trucks/containers at room temperature.
Shelf life:	2 year from its manufacture date
Handling and conservation conditions:	This product should be stored in a cool, dry place without sun exposure. Stow on pallets at a minimum height of 15 cm from the floor, 50 cm from the wall. For export, wooden pallets are required to be fumigated and certified by IPSA.
GTIN identification number	74-33200-73900-6

