

## Product specification

### HydroBEEF™ Item No.: 41300-105 (330)

<b>Description</b>	HydroBEEF™ is a water soluble animal protein manufactured from 100 % natural fresh, meaty beef bones approved for human consumption. A beef product without any additives, manufactured by mechanical and thermal treatment.
<b>Ingredients</b>	Beef protein
<b>Application area</b>	Nutrition
<b>Raw material origin</b>	EU - Beef
<b>Manufactured in</b>	SE

#### Appearance

Particle size	Fine powder
Colour	Pale cream
Flavour	Neutral
Bulk density	<0.45 g/cm <sup>3</sup>

#### Nutrition (typical values)

		<b>Method</b>
Protein (N x 6,25)	95-99 %	NMKL 6
Fat (total)	1-3 %	Bromnaphthalin
- Saturated fat	0.9 %	Calculated
- Mono-unsaturated fat	1 %	Calculated
- Polyunsaturated fat	0.1 %	Calculated
Moisture	2-6 %	NMKL 23
Carbohydrates	< 1 %	Calculated
Ash	1-3 %	NMKL 173
Salt (total)	1-3 %	NMKL 178
pH	6-7	
Dietary fibre	< 1 %	Calculated
Phosphate (natural occurrence)	< 1 %	Calculated
Collagen	78-84 %	Calculated

#### Energy in 100 g

1750 kJ / 410 kcal

#### Microbiology

		<b>Method</b>
TPC	< 10,000 CFU/g	NMKL 86
Salmonella in 375 g	negative	A-Bax
E. coli in 1 g	negative	ISO 7251
Coliforms in 1 g	negative	ISO 4831
Sulphite-red. clostridia	< 100 CFU/g	NMKL 56
Mould & yeast	< 50 CFU/g	NMKL 98
Bacillus cereus	< 100 CFU/g	DS/ISO 7932
Enterobacteriaceae	< 10 CFU/g	NMKL 144
Staph. aureus in 25 g	negative	NMKL 66 Mod.
Listeria monocytogenes	< 100 CFU/g	ISO 11290-2

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### Production and packaging

Packaging	White polythene-lined paper bag
Unit weight	25 kg
Pallet type	One-way wooden pallet 120x80 cm, heat-treated
Storage condition	Ambient temperature (5-28°C) and dry condition
Shelf life unopened	36 months
Pallet weight	600 kg

### Statements

Safety and handling	A material safety data sheet is available upon request
GMO statement	The product does not contain or consist of GMO's and is not produced from GMO according to the definition of Regulation (EC) No. 1829/2003 and 1830/2003.
Legislation	The product has been manufactured in accordance with and meets all current relevant EU- and Swedish legislation.
BSE	A statement is available upon request.

### Amino acid profile (typical values – g/100 g product)

Alanine	8.8
Arginine	7.5
Aspartic acid	6.0
Cystine + cystein	< 0.1
Glutamic acid	11
Glycine	20
Histidine	1.1
Hydroxyproline	10.2
Isoleucine	1.7
Leucine	3.7
Lysine	3.8
Methionine	0.9
Phenylalanine	2.3
Proline	12
Serine	3.4
Threonine	2.1
Tryptophane	0.36
Tyrosine	1.3
Valine	3.0

### Minerals (typical values)

Calcium (Ca)	< 5 mg/100 g
Iron (Fe)	< 5 mg/100 g
Magnesium (Mg)	< 5 mg/100 g
Phosphorus (P)	29 mg/100 g
Potassium (K)	250 mg/100 g
Sodium (Na)	0.7 g/100g

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### Heavy metals (typical values)

Arsenic (As)	< 0.05 mg/kg
Cadmium (Cd)	< 0.01 mg/kg
Chromium (Cr)	< 0.05 mg/kg
Copper (Cu)	< 1 mg/kg
Lead (Pb)	< 0.02 mg/kg
Mercury (Hg)	< 0.02 mg/kg
Zinc (Zn)	< 1 mg/kg

### Allergens

	Yes	No		Yes	No
Peanuts and products thereof		X	Eggs and products thereof		X
Soybeans and products thereof		X	Cereals containing gluten * and products thereof		X
Fish and products thereof		X	Shellfish and products thereof		X
Crustaceans/molluscs and products thereof		X	Nuts ** and products thereof		X
Sulphur dioxide and sulphites		X	Sesame and products thereof		X
Celery and products thereof		X	Lupin and products thereof		X
Mustard and products thereof		X	Cow's milk protein and products thereof		X

\* **Cereals** including wheat, rye, barley, oats, spelt, kumat

\*\* **Nuts** including almond, hazelnut, walnut, cashew, pecan, brazil, pistachio, macadamia

### Intolerance data

	Yes	No		Yes	No
Rye		X	Beef	X	
Pork		X	Chicken/turkey		X
Maize and products thereof		X	Cocoa and products thereof		X
Yeast		X	Carrot		X
Benzoic acid/parabens (E210-E219)		X	Legumes/pulses		X
Glutamate added		X	Azo dyes		X
Taetrazine (E102)		X	Cinnamon		X
Vanillin		X	Coriander		X
Umbelliferae		X	Suitable for ovo-lacto vegetarians		X
Suitable for vegans		X	Suitable for coeliacs	X	
Kosher-certified		X	Halal-certified	X	

#### Disclaimer

At the time of issue this information is presented for consideration in the belief that it is accurate and reliable. No warranty, either expressed or implied is made and no freedom from liability from patents, trademarks, or other limitations should be inferred. Any data listed is based upon typical results from reference samples and is averages only, and such information is not to be considered as guarantees or as a condition of sale. Further we acknowledge that the crossing of species can be either legally prohibited or ethically incorrect. We disclaim responsibility regarding disputes or complaints based on cross-species contamination in the consumer end product as well as on labelling issues, including but not limited to the user's wrongful use of the products. It is further the user's responsibility to make tests to insure that the products will work in the actual process and that the use of the products is correct and in accordance with existing legislation.

#### Essentia Protein Solutions AB

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