

1. What is Yeafa Brewer's yeast?

Yeafa Brewer's yeast is a pure spray dried spent yeast (*Saccharomyces cerevisiae*) originating from local breweries.

2. How is Yeafa Brewer's yeast produced?

Yeafa Brewer's yeast is sourced locally at big lager beer breweries storing their liquid spent yeast in cooled tanks.

At the YEAFa plant multiple daily arrivals of fresh yeast is stored in monitored and cooled tanks under the perfect conditions to maintain quality and avoid degradation of the cells as well as bacterial growth in the liquid.

The transformation process is initiated very soon after arrival of the yeast.

In order to maintain as much intact cells as possible and to keep the soft creamy taste a gentle drying technique is applied.

The drying technique is very innovative with eye for a minimal environmental impact.

The thermal process inactivates the cells and sanitises the product.

3. What are the characteristics and applications of Yeafa Brewer's yeast?

The spray dried yeast product is a highly digestible protein source with an optimal amino acid profile. With its high levels of B vitamins and its excellent palatability it helps to improve feed quality resulting in improved animal growth and health.

Yeafa Brewer's Yeast is a source of high value nutrients:

- The amino acid composition is very interesting for animal nutrition and comparable to soybean meal, containing high levels of Lysine, Methionine, Threonine, Tryptophan and Valine.
- The protein digestibility is very high due to the gentle drying method in our dedicated factory.
- Yeafa Brewer's yeast has a high level of ribonucleic acid and nucleotides. These are indispensable molecules for the growth of young cells. Therefore it has a positive effect on the growth of the intestinal mucosal cells.
- Yeafa Brewer's yeast has very good organoleptic characteristics and improves the palatability of the feed, partially due to the high level of glutamic acid.
- Yeafa Brewer's yeast contains high levels of B-vitamins
- The cell wall of yeast contains manno-oligosaccharides which have a positive effect on intestinal health.
- Yeafa Brewer's yeast has a positive effect in case of digestive disorders in various animal species.
- The Beta glucans in the yeast cell wall activate the immune system.
- Yeafa Brewer's yeast is known to have positive effects on the skin, hair and nails
- Yeafa Brewer's yeast is GMO-free.



4. What are the advantages of Yeafa's Brewer's yeast compared to other dried yeasts?

Efficient supply chain and drying method to maintain the quality of the yeast. Less autolysis, bacterial growth and low risk of formation of biogenic amines.

Dedicated factory using the most modern and efficient drying method.

- No risk of contaminations with other products.
- No other ingredients such as urea or other N-source are added during the process .

High standards for quality assurance

- Sampling and controlling all deliveries of spent yeast
- In-line monitoring of the full production process
- Sampling and controlling all outgoing batches

Feed and Food Safety

- FCA- Ovocom controlled
- All regulatory requirements are fulfilled to meet the EU standards for feed materials (Yeast)

Low carbon footprint

- Supply of the liquid yeast which is a side stream for the production of beer from nearby breweries
- Drying method recycles steam from a neighbouring factory

5. Composition and properties

Indicative analyse	
Parameters	Average % (*)
Crude protein (N X 6.25)	40,0
Crude fat	0,02
Crude fiber	0,75
Crude ash	6,2
Moisture	≤ 7
Aminoacid	Average % (*)
Asp	3,80
Thr	1,95
Ser	2,24
Glu	5,71
Gly	1,85
Ala	2,64
Cys	0,63
Val	1,79
Met	0,69
Ile	1,49
Leu	2,62
Tyr	1,43
Phe	1,60
Lys	2,58
His	0,89
Arg	2,02
Pro	2,15
Trp	0,60

Relevant parameters	
<i>Sensoric</i>	
Colour	Beige
Odour	Typical Yeast
<i>Technological (*)</i>	
pH	6 +/- 0,5
Density	660 +/- 50 g/l
Particle size	95 % < 100 µ, typical 60 µ
<i>Microbiologic</i>	
Totaal count	< 10 000 kve/g
Salmonella	Afwezig/25 g
Moulds	< 1 000 kve/g
<i>Chemical</i>	
<i>Heavy metals :</i>	
Pb	< 5 ppm
Hg	< 0,1 ppm
Cd	< 1 ppm
As	< 2 ppm
<i>Other contaminants</i>	In accordance with (EG) Nr. 2002/32 on undesirable substances in animal feeding
<i>Physical</i>	
Undesirable substances	Absent
Pests, Vermin	Absent
GGO's	In accordance with Regulations (EC) No. 1829/2003 and 1830/2003 Product not labeled as GMO

(*) Values base on calculations based on available data on the moment of publication of this specification