



PRODUCT BENCHMARK TECHNOYEAST

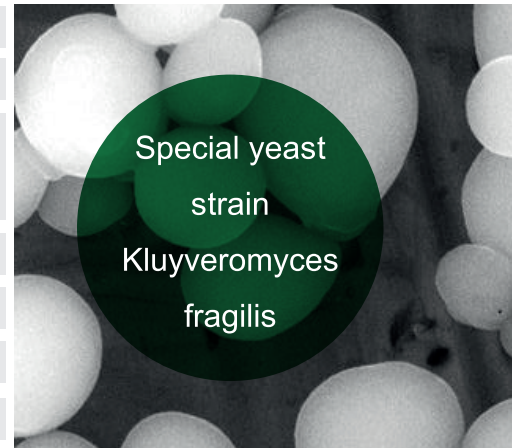
IPC[®]
INTERPHARMA

Biochem[®]
Feed Safety For food Safety

TechnoYeast

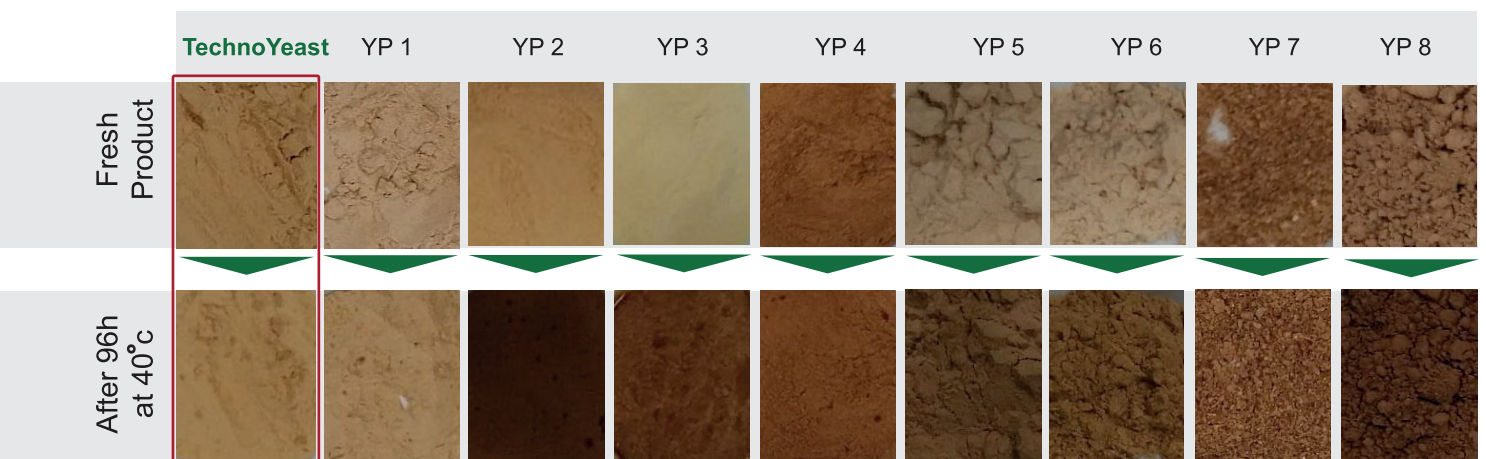
WHAT DISTINGUISHES TECHNOYEAST

- ◆ Primary grown yeast
- ◆ Milky-umami flavor/ taste
- ◆ Origin from human nutrition
 - Used especially in infant formulas as a nucleotide source
 - Improves gastric development and early immune function
- ◆ Rich in highly digestible proteins (peptides, AA...)
- ◆ Standardized, efficient and gentle hydrolysis process
- ◆ Small and homogeneous particle size distribution
- ◆ Stable quality
- ◆ No anti-nutritional factors
- ◆ Excellent feed material for young animals!!



Well documented

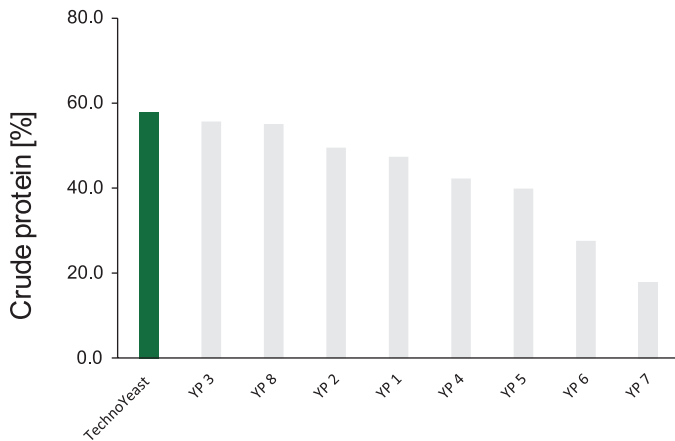
PRODUCT ALTERATION RELATED TO ENVIRONMENTAL CONDITIONS



Dark products and discolorations are indicators for lower/unstable quality. Only TechnoYeast and yeast product 1 (YP 1) have and remain a natural light brown color. A correlation between product discoloration and hygroscopicity can be observed. The higher the hygroscopicity the higher the discoloration.



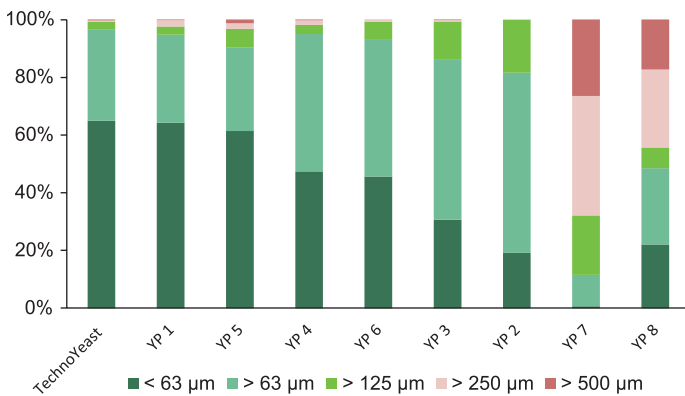
THE CRUDE PROTEIN CONTENT



A high protein content is beneficial since it serves as a nutrient source of crude protein, which delivers valuable peptides, amino acids and nucleotides. A high protein content enables an exchange of other protein sources in the feed formula, which leads to feed cost savings.

With TechnoYeast you get a guaranteed minimum value of > 50 % of highly digestible protein.

THE PARTICLE SIZE DISTRIBUTION

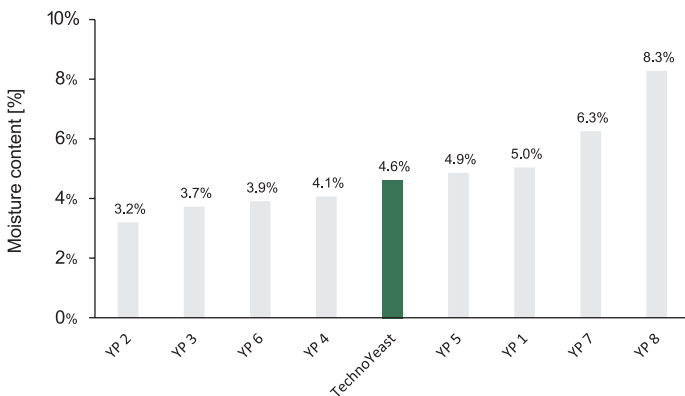


A small particle size:

- increases the surface area of the product and increases e.g., the pathogen binding capacity (MOS)
- enhances the availability of the functional ingredients
- simplifies the solubility in milk replacers
- confirms a high bulk density results

Compared to the other products, TechnoYeast shows the smallest/ best particle size distribution.

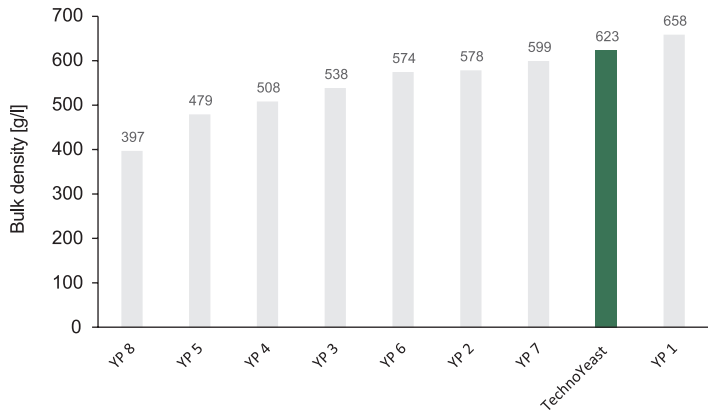
THE MOISTURE CONTENT OF THE YEAST PRODUCTS



A dry product with <5% moisture has a low risk for clumping and bacterial and fungal infestations!

The dried product TechnoYeast is specified to have a low moisture content below <5%.

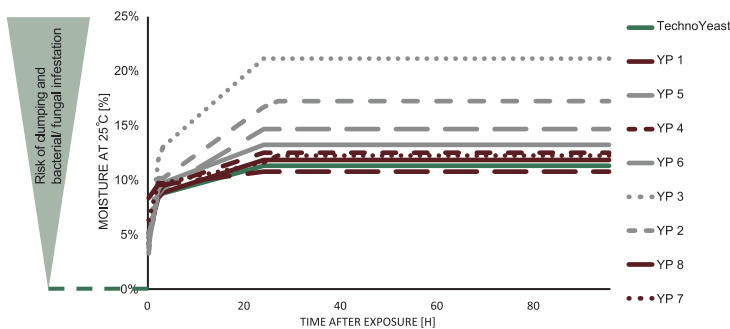
THE BULK DENSITY



A high bulk density allows compact packaging and thus improves storage capacity.

TechnoYeast showed a very high bulk density!

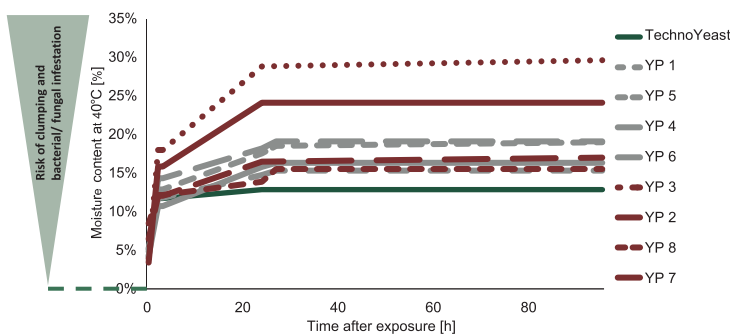
THE HYGROSCOPICITY OF YEAST PRODUCTS AT 25°C



A low hygroscopicity is a very important feature, because a high hygroscopicity leads to clumping of the product and risk of bacterial and fungal infestation, which is a risk during storage.

TechnoYeast has one of the lowest hygroscopicity of tested yeast products at 25°C.

THE HYGROSCOPICITY OF YEAST PRODUCTS AT 40°C



A low hygroscopicity is a very important feature, because a high hygroscopicity leads to clumping of the product and risk of bacterial and fungal infestation, which is a risk during storage.

TechnoYeast has one of the lowest hygroscopicity of tested yeast products at 40°C.

PERFORMANCE SCORING

Points	Distinguishing features						
	Color	Protein content	Bulk density	Particle size	Moisture content	Hygroscopicity (25°C)	Hygroscopicity (40°C)
★ ★ ★ 3	Rarely discolored	>50% of CP	>600 %	>95% with <125µm	<5% of moisture	<13% of hygroscopicity	<13% of hygroscopicity
★ ★ ★ ★ 2	Slightly discolored	30-50% of CP	500-600 %	80-95% with <125µm	5-6% of moisture	13-18% of hygroscopicity	18-20% of hygroscopicity
★ ★ ★ ★ ★ 1	Strongly discolored	<30% of CP	<500 %	<80% with <125µm	>6% of moisture	>18% of hygroscopicity	>20% of hygroscopicity



WHICH PRODUCT SHOWS THE BEST PERFORMANCE IN TOTAL?

Product	Color	Protein content	Bulk density	Particle size	Moisture content	Hygroscopicity		Total Points
TechnoYeast	3	3	3	3	3	3	3	21
YP1	3	2	3	2	2	3	3	18
YP4	3	2	2	2	3	3	3	18
YP3	1	3	2	2	3	1	2	14
YP2	1	2	2	2	3	2	2	14
YP5	2	2	1	2	3	2	2	14
YP7	3	1	2	1	1	3	3	14
YP6	2	1	2	2	3	2	2	14
YP8	1	3	1	1	1	3	3	13

In total TechnoYeast reaches highest score in current benchmarking!





The present benchmarking points out why choosing TechnoYeast in the wide range of available inactivated yeast products is a good idea.

Unique quality of TechnoYeast



Compared to the competitors TechnoYeast shows in almost all categories the best quality features:

- Most stable quality
- Highest content of highly available crude protein
- Very high bulk density
- Smallest particle size distribution
- Lowest hygroscopicity



For maximum effects in the animal and good processability!

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