

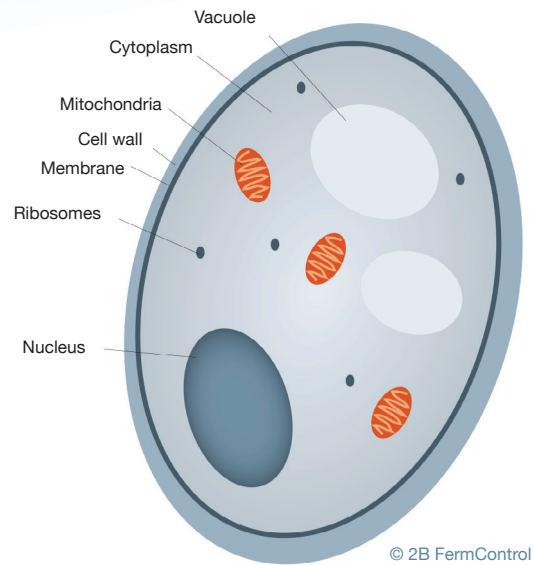
## What are yeast derivatives?

Yeasts are microorganisms and belong to the group of eukaryotes (living beings whose cells – in contrast to prokaryotes, such as e.g. bacteria – have a real cell nucleus).

The yeasts of the species *Saccharomyces cerevisiae* are among the most intensively researched microorganisms. The easy reproducibility, together with the biological composition of the ingredients, make the yeast cell the ideal donor for a variety of organic raw materials and applications, from food production, biotechnology, to pharmacy.

The distinction between yeast products with regard to their biological composition is regulated by the legislator. For the wine industry, the OIV (Organisation Internationale de la vigne et du vin) has carried out the classification of the various yeast products and written them down in the OIV Code:

**OIV: Oeno-Specif 10-452- 497**



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Illustration: Schematic drawing of a yeast cell

## Yeast products in comparison

Ingredients/ Properties	Yeast Cell Wall	Inactive Yeast	Yeast Autolysate	Yeast Protein Extract (YPE)
<i>Illustration</i>				
<b>2B Product solutions</b>	ClearUp BIO	FermControl™ BIO RePrise™ BIO MaloControl™ BIO	„ViniComplex™ XS”	
<b>Purpose (OIV)</b>	Prevention and correction of stuck fermentation	Nutrition while alcoholic fermentation, Rehydration of yeast	Excipient during winemaking	Use as a fining agent in wine
<b>Soluble parts of dry matter (OIV)</b>	max. 10 %	max. 40 %	max. 80 %	
<b>Areas of application in winemaking</b>	Adsorption of inhibitory substances, e.g. spraying residuals, sensory purity	Supplier of amino acids, macro- and micronutrients, contribution to aroma protection, reduction of ochratoxin A	Supplier of amino acids, macro- and micronutrients, contribution to aroma protection, <b>sensorially not neutral!</b>	Removal of turbidity causing substances, phenols, <b>very expensive!</b>
<b>Relevant components</b>	Lipids release of sterols and unsaturated fatty acid	Amino-N trace elements, vitamins, glutathione (GSH)	Amino-N trace elements, vitamins, glutathione (GSH)	Protein extracts from the cytoplasm
<b>Nourishing effect</b>	low	high	high	low
<b>Adsorptive effect</b>	high	high	low	low
<b>Phenol-reduction</b>	high	average/medium	average/medium	high
<b>Dosage</b>	max. 40 g/hL	not limited	not limited	max. 30 – 60 g/hL

Yeast mannoprotein and inactive yeast with guaranteed glutathione content (GSH) are not dealt with here.