

Viniflora™ FrootZen™

Product Information

Version: 2 PI GLOB EN 07-26-2023

Description

Viniflora™ FrootZen™ is a pure strain of yeast *Pichia kluyveri* strengthening the fruity characteristics of the wine and ensuring bio-protection. FrootZen™ can be used at several stages of the process as a pre-fermentation product (on harvested grapes, on crushed grapes, or in must). The culture is recommended when making white and rosé but can also be used in red wines. The product is delivered in a user-friendly freeze-dried format.

Please note

This specialty wine yeast product is not intended to complete alcoholic fermentation but to improve wine complexity. To achieve alcoholic fermentation it is necessary to have *Saccharomyces cerevisiae* already present or later inoculated in the must.

This *Pichia kluyveri* yeast can also be used in No-low alcoholic beverages - please consult our local representative for more information.

Culture composition:

Pichia kluyveri.

Material No:	727200	Color:	Off-white to slightly brown
Size	10X2500 L	Format:	FD-DVS
Type	Pouch(es) in box	Form:	Freezedried

Storage

< -18 °C / < 0 °F

Shelf life

When stored according to recommendation the product has a shelf life of 12 months.

Dosage

It is recommended to use a 375g bag in 25 hl (660 US gallons)

Application

This specific and pure strain of *Pichia kluyveri* ensures a safe and reliable start to alcoholic fermentation in white, rosé and red wines. It gives winemakers the opportunity to boost fruit flavors, optimizing the conversion of soluble grape-derived fruit flavor precursors into volatile flavors.

FrootZen™ gives four simultaneous effects to wines:

- Increased fruit flavor intensity and complexity
- Reduced risk of oxidation
- Reduced risk of volatile acidity by apiculated yeast (*hanseniaspora spp.*)
- Boost indigenous *Saccharomyces* in non-inoculated wines

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Directions for use

Direct inoculation

Cut the top of the bag and pour the content into the tank or the crusher. To increase dispersal, an optional rehydration for 20 minutes in a small quantity must can be applied. Gentle mixing a few times per day after inoculation is highly recommended.

Remark: After a few days the yeast can generate a thin layer at the top of the tank, as the strain has a high affinity for oxygen. The film will be broken later in the winemaking process.

Timing for inoculation

The yeast should be inoculated first, followed by the inoculation of the *Saccharomyces cerevisiae* strain(s) of choice.

- 24 hours before *Saccharomyces cerevisiae* inoculation when temperature is high (red wine production)
- 48-72 hours before *Saccharomyces cerevisiae* inoculation when temperature is low (white and rosé wine production)

Technical Data

Fermentation characteristics

Flavors	Symbiosis and Antagonisms	Other interests
Enhance fruit flavors (thiols, terpenes, esters)	<ul style="list-style-type: none"> • Inhibition of apiculate yeasts • Low nitrogen demand, early lysis and release of growth factors: Beneficial to <i>Saccharomyces</i> fermentation with a reduced risk of stuck fermentations 	<ul style="list-style-type: none"> • Reduces the risk of • Low/No alcoholic fermentation: can be used to bring flavor in No/low alcohol beverages

Physiological data

Parameter	Value(s)	Comment
Temperature*		
Tolerance limits	10-30° C (50-92° F)	
Optimum	15-25° C (59-77° F)	
Total SO2 tolerance*	45 ppm at crush	(mg/l)
Alcohol tolerance*	6.0%	
Nitrogen requirements	Low	
Sugar to alcohol yield	Not significant	Low sugar consumption

Dietary information

Legislation

The product is intended for use as an oenological ingredient and complies with the current OIV index. The product complies with the general requirements on food safety laid down in Regulation (EC) 178/2002 and with Regulation (EU) 934/2019 of 12 March 2019 applied to wine ingredients. The product is approved for use in organic wines complying with Regulation (EC) 834/2007 and US NOP regulation. The product is validated by ECOCERT.

Food Safety

No guarantee of food safety is implied or inferred should this product be used in applications other than those stated above. Should you wish to use this product in another application, please contact your Chr. Hansen representative for assistance.

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Labeling

No labeling required, however please consult local legislation if in doubt.

Trademarks

Product names, names of concepts, logos, brands and other trademarks referred to in this document, whether or not appearing in large print, bold or with the ® or TM symbol are the property of Chr. Hansen A/S or an affiliate thereof or used under license. Trademarks appearing in this document may not be registered in your country, even if they are marked with an ®.

Additional Information

Check the latest news on www.chr-hansen.com/food-cultures-and-enzymes

Technical support

Chr. Hansen's Application and Product Development Laboratories and personnel are available if you need further information.

GMO Information

In accordance with the below mentioned legislation of the European Union we can inform that:

Viniflora™ FrootZen™ is not a GM (genetically modified) food*.

It does not contain or consist of GMOs and is not produced from GMOs in accordance with Regulation 1829/2003* on GM food and feed.

As such GM labelling is not required for **Viniflora™ FrootZen™** or the food it is used to produce**. Moreover, the product does not contain any GM labelled raw materials.

* Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed.

** Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC.

Please note the information presented here does not imply that the product can either be used in, or is externally certified to be used in, food or feed labelled as 'organic' or 'GMO free'. Requirements to make these claims vary per country, please contact us for more information.

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Allergen Information

List of common allergens in accordance with the US Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) and EU Regulation 1169/2011/EC with later amendments	Present as an ingredient in the product
Cereals containing gluten* and products thereof	No
Crustaceans and products thereof	No
Eggs and products thereof	No
Fish and products thereof	No
Peanuts and products thereof	No
Soybeans and products thereof	No
Milk and products thereof (including lactose)	No
Nuts* and products thereof	No
List of allergens in accordance with EU Regulation 1169/2011/EC only	
Celery and products thereof	No
Mustard and products thereof	No
Sesame seeds and products thereof	No
Lupine and products thereof	No
Mollusks and products thereof	No
Sulphur dioxide and sulphites (added) at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO ₂	No

* Please consult the EU Regulation 1169/2011 Annex II for a legal definition of common allergens, see European Union law at: www.eur-lex.europa.eu