

## F-DVS NEER®

### Product Information

Version: 3 PI GLOB EN 03-25-2022

### Description

F-DVS NEER® is a pure culture of *Pichia kluyveri* to be used in non-alcoholic fermented food and beverages: malt or other cereals, fermented based products, fruits, nuts or vegetables juices. The product is delivered as a deeply frozen (-45°C) bag ready for direct inoculation; it does not require re-hydration or acclimatization.

### Culture composition:

*Pichia kluyveri*.

Material No:	723536	Color:	Off-white to slightly brown
Size	1X50 hL	Format:	F-DVS
Type	Bag(s) in box	Form:	Frozen liquid

### Storage

< -45 °C / < -49 °F

### Shelf life

When stored according to recommendation the product has a shelf life of 18 months.

### Dosage

It is recommended to use one bag in 5000 L / 50 hl / 1320 US gallons.

### Application

This specific and pure strain of *Pichia kluyveri* ensures a safe and reliable start to fermentation in wort, fruit or vegetable juices. Product fermented with NEER® will have simultaneously several of the following improved features:

- Limited alcohol production (only consumes glucose and fructose)
- Production of fruity esters
- Lower volatile acidity
- Rounder mouth-feel
- Removes cereal aldehydes and earthy off-flavors in vegetable juices

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### Directions for use

SmartBev™ NEER® is a frozen liquid yeast stored at < -45°C. Prior to usage the product needs to be thawed in a 30°C water bath, preferably with circulation.

### Preparation of SmartBev™ NEER®

- The product is removed from the freezer ½-1 hour before pitching
- Take care when handling the product directly from -45°C
- Take the product pouch as well as the sterile Codan transfer set out of the cardboard box
- Set the sterile Codan transfer set aside
- Place the product pouch in a 30°C\* water bath (preferably with circulation)
- After one hour\*\* the yeast should be defrosted (check by visually inspecting the pouch for remaining frozen product)
- Wipe the pouch with a cloth to remove excess water

### Pitching the SmartBev™ NEER®

- Make sure that the content of the pouch is homogenous by carefully turning the pouch up-down a couple of times
- Take the transfer set out of its bag
- Peel off the foil covering the sterile septum of the pouch
- Pinch the clamp, remove one of the end caps and insert the spike through the septum of the pouch
- Remove the second end cap, loosen the pinch clamp and transfer the yeast by gently squeezing the pouch
- As sterile as possible, transfer the yeast into the wort

\*Please respect the thawing temperature, do not go above the 30°C as it may affect the viability.

\*\* Half an hour is sufficient if the water bath has circulation and a good temperature control. However, if the water bath does not have circulation, 1 hour of thawing can be expected.

Note: Never place the product in a -18°C freezer, follow carefully the instruction and move the product out of the -45°C freezer right before inoculation.

### Post fermentation process

Make sure to pasteurize the beer after fermentation. Minimum 10 pasteurization units (PU) is needed to remove NEER®, but it is recommended to use higher PU in order to make sure the beer is stable on the shelf.

## Technical Data

### Physiological data - fermentation parameters

Optimal fermentation temperature: 16-18°C

Flocculation: none

Metabolism: consumes only glucose and fructose, does not consume disaccharides and longer chain sugars

Flavor profile: fruity esters, tropical and pear aroma (depending on fermentation length)

Diacetyl rest is not needed

## Legislation

The product is intended for use in food. Chr. Hansen's cultures comply with the general requirements on food safety laid down in Regulation 178/2002/EC and with Council Regulation (EC) No 606/2009 of 10 July 2009, as amended.

## 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

Chr. Hansen's worldwide facilities and the personnel of our Application and Technology Center are at your disposal with assistance and instructions.

### Technical support

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

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### GMO Information

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

F-DVS NEER® 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 F-DVS NEER® 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 <sub>2</sub>	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](http://www.eur-lex.europa.eu)