



Product Information

Description

This product is a pure strain of *Torulaspora delbrueckii* to be used in combination with your *Saccharomyces cerevisiae* strain (or strains) of choice.

Chr. Hansen's pure *Torulaspora delbrueckii* strain ensures a safe and reliable start of the alcoholic fermentation in both white, rosé or red wines. It gives a softer palate, rounder mouth-feel, increases wine aromas spectrum and longevity.

However, *Torulaspora delbrueckii* will not persist until the end of the alcoholic fermentation. Therefore, PRELUDE $^{\text{m}}$ has to be inoculated with a *Saccharomyces cerevisiae* to achieve a safe, smooth and fast alcoholic fermentation in wines.

This non-Saccharomyces strain has been especially selected for its enhancement of complexity and mouth-feel in wine. Grape musts inoculated with PRELUDE^{\mathbb{M}} produce wines that have been noted to have a more complex character getting consumers preference, compared to fermentations with pure Saccharomyces yeast products.

Chr. Hansen recommends the use of MERIT -a pure Saccharomyces cerevisiae strainwith PRELUDE™. However, winemakers can safely use any type of Saccharomyces cerevisiae in combination with PRELUDE™.

 SO_2 and H_2S production by PRELUDETM are low, and compatibility with malolactic cultures is good. To achieve fast and safe malolactic fermentations, always use a strain of *Saccharomyces cerevisiae* producing low levels of SO_2 .

Application

PRELUDE™ is provided as a dried culture that should be re-hydrated and activated before addition to the wine, as the standard procedure for active dry yeast.

Chr. Hansen recommends rehydrating PRELUDE™ in warm water at 20-25°C / 68-77°F separately from the re-hydration of the *Saccharomyces cerevisiae* chosen (see detailed directions for use below).

PRELUDE^{\mathbb{M}} will be present during the first stage of the alcoholic fermentation in the wine, depending on the wine and application; it is present approximately until the ethanol concentration reaches 9% (V/V). Then the culture dies and the alcoholic fermentation can be completed only by more alcohol tolerant species such as *Saccharomyces cerevisiae*.

PRELUDE™ produces very low levels of:

- SO₂ and H₂S,
- ethanal (acetaldehyde),
- acetic acid.

PRELUDE PI EN July 2010/1:5

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Product Information

CHR HANSEN

 $\mathsf{PRELUDE}^\mathsf{TM}$ gives three simultaneous effects to added wines, increasing their complexity:

- A rounder, smoother mouth-feel described as an increased palate weight;
- 2 Associated with a higher flavor complexity and intensity...
- **3** ... and a lower volatile acidity.

Warning

 $PRELUDE^{\mathbb{M}}$ is not intended to achieve the alcoholic fermentation but to improve the wine complexity.

Never use PRELUDE™ without a strain of Saccharomyces cerevisiae.

Grapes

Recommended for both red and white wine grape varieties where an improved complexity is requested both on mouth feel and flavors longevity

- Merlot
- Cabernet-Sauvignon
- Shiraz
- Carignan
- Pinot Noir
- Grenache
- Tempranillo
- Zinfandel
- Mourvèdre
- Cinsaut
- Malbec

- Chardonnay
- Sauvignon Blanc
- Semillon
- Riesling
- Pinot Gris
- Pinot Blanc
- Ugni Blanc
- Chenin

Product Information



Instructions for use

1. Rehydration

Add a PRELUDE $^{\text{M}}$ bag content to unchlorinated tap water or mineral water in a ratio of 1:10 at 20-25 $^{\circ}$ C / 68-77 $^{\circ}$ F. Let the yeast absorb water for at least 10 minutes and stir again to a homogenous suspension.

2. Activation

Add unsulfured grape must to the yeast suspension in a ratio of 1:3. Leave the mixture for approx. 20 minutes.

3. Acclimatization

When small bubbles are visible on the surface of the yeast/must mixture, add it to the must tank and pump over to make sure that the yeast is well suspended.

If the must has a low temperature ($10-15^{\circ}$ C / $50-59^{\circ}$ F) adjust the temperature of the yeast suspension slowly to $20-25^{\circ}$ C / $68-77^{\circ}$ F before adding to the must.

Timing for inoculation

Depending the amount of time available for wine production and the desired effect, inoculation of PRELUDE™ can be done following two protocols:

Simultaneous inoculation

Together with Saccharomyces cerevisiae strain(s) of choice: this is recommended when time available at crush time is limited and/or the overall fermentation time needs to be kept the same. We recommend to re-hydrate the two yeasts separately and to carefully follow the instructions for re-hydration of both yeasts (especially water temperatures and the use of unchlorinated water). This will secure a mild 'wild effect' related to PRELUDETM associated with a smooth start of the alcoholic fermentation.

Sequential inoculation

PRELUDE™ inoculated first, followed by the inoculation of *Saccharomyces cerevisiae* strain(s) of choice. PRELUDE™ has to be inoculated first and a lag phase has to been observed that will depend on must temperature. Chr. Hansen recommends to inoculate the standard *Saccharomyces* yeast after a drop of 15-20 points at least in density or 5 °Brix. This leads to inoculate PRELUDE™:

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

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Product Information



Dosage

It is recommended to use one 500 g pouch in 35-50 hl / 900-1300 US gallons under normal conditions and in 25-35 hl / 660-920 US gallons under harsh conditions.

Technical data

| Temperature range*): Tolerance limits Optimum temperature | 10-28°C (50-82°F) 15-25°C (59-77°F) |
|---|--|
| SO ₂ tolerance*) | 30 ppm total at crush |
| Alcohol maximum*) | 9.0 % V/V |
| Sugar/Alcohol yield | Non applicable here (ethanol production is not the purpose for using this product) |
| Glycerol yield | Standard (Approx. 5 - 8 g/l) |
| Storage and shelf life | Dried yeast stored at 5°C / 41 °F will have a shelf life of 24 months from the date of manufacture. Upon opening, the sachet should be used at once. |
| Appearance | Light brown granulate |
| Packaging | Vacuum packed aluminum foil sachets |

^{*)} Note: that a combination of several inhibitory factors will have a negative effect. The individual tolerances are valid only if other conditions are favorable.

Packing

Packing size $1 \times 500 \text{ g}$

Material number 699118

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Product Information



Product content

The drying process used to get Active Dry Yeasts is extremely harsh for living organisms like yeasts. In order to protect the yeast during this production step, an emulsifier is added to the yeast batch. This emulsifier addition is a common practice for all yeasts produced at industrial scale such as bakery yeasts, brewing yeasts or wine yeasts. In 2010, the International Association of Wine Ingredients Manufacturers, OENOPPIA, decided to voluntarily label on wine yeast package the use of this necessary processing aid in order to increase the level of information provided to winemakers.

Today, each and every wine yeast product available on the market contains an emulsifier used as a processing aid in production. Chr. Hansen wine yeasts products contain less than 1% of mono and di-glycerides of fatty acids from vegetable sources. This emulsifier is broadly authorised in food products around the world and has a proven record of safety demonstrated by its E number (E471).

Chr. Hansen wine yeasts products content is strictly identical to previous batches delivered in the past. The only change is the voluntary labelling of the emulsifier used in production as a processing aid.

Technical service

Chr. Hansen's worldwide facilities and the personnel of our application and technology center are at your disposal with assistance and instructions.

VISIT US! And learn more about fermentation management with Viniflora®

www.chr-hansen.com/wine