Viniflora® JAZZ™
Product Information
Version: 5 PI GLOB EN 08-24-2018

Description
Viniflora® JAZZ™ is a strain of *Saccharomyces cerevisiae* for direct inoculation in must, isolated from a must of Shiraz in South Africa. The strain was selected for its capability to achieve a fast and reliable alcoholic fermentation, mainly on rosé and red wines. The technological qualities of JAZZ™ are multiples: good tolerance to alcohol, low production of sulfites, interesting aromatic profile in the direction of spicy fruitiness and good symbiosis with malolactic bacteria from Viniflora® range (e.g. NOVA, CH11), which makes it a tool for excellence.

This product is delivered as Direct Vessel Starter (DVS®) active dry yeast.

Culture composition:
*Saccharomyces cerevisiae*.

| Material No: | 714253 |
| Size        | 500 g  |
| Form:       | Powder |

Storage
0 - 8 °C / 32 - 46 °F

Shelf life
When stored according to recommendation the product has a shelf life of 24 months.

Dosage
It is recommended to use 500 g pouch in 20 hl (528 gal) i.e.25g/hl.

Application
Recommended for red wine grape varieties:
- Merlot
- Grenache
- Cabernet Sauvignon
- Tempranillo
- Syrah/Shiraz
- Zinfandel
- Carignan
- Petite Shiraz
- Pinotage

Recommended for white wine varieties:
- Chardonnay
- Riesling
- Pinot Gris
- Sauvignon Blanc
- Pinot Blanc

Material No: 714253
Color: Off-white to slightly brown
Type: Vacuum packed alu-foil pouch
Size: 500 g
Form: Powder
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Directions for use
No Rehydration/Activation is needed.
Add the relevant quantity of yeast culture during the filling of the tank (preferably after filling 20-30% of the tank with juice), by sprinkling the powder from the top of the tank. Leave to soak for 1-2 hours and then mix by pumping over.

Remark: The rehydration/activation process can still be used if wanted.

Technical Data

Physiological data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value(s)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature*</td>
<td>10-32°C (50-90°F)</td>
<td></td>
</tr>
<tr>
<td>Tolerance limits</td>
<td>15-30°C (59-86°F)</td>
<td></td>
</tr>
<tr>
<td>Optimum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO2 tolerance*</td>
<td>90 ppm at crush</td>
<td></td>
</tr>
<tr>
<td>Alcohol tolerance*</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Nitrogen requirements</td>
<td>low</td>
<td>Check YAN before inoculation</td>
</tr>
<tr>
<td>Sugar to alcohol yield</td>
<td>17.7 g / % vol</td>
<td></td>
</tr>
<tr>
<td>Glycerol yield</td>
<td>5 – 8 g/l</td>
<td>standard</td>
</tr>
</tbody>
</table>

* note that these inhibitory factors are antagonistic towards each other.
The individual tolerances are valid only if other conditions are favourable.
Check level of SO₂ produced by the yeast used for primary fermentation and be aware of level of free SO₂.

Legislation
The product is intended for food use as an œnological product and complies with the current International Oenological Codex. 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.
The product is approved for use in organic wines (EU and NOP), a statement can be provided on demand.

Product content
Wine yeast products available on the market contain emulsifier used as a processing aid in production. Chr. Hansen wine yeasts products contain less than 1% sorbitane monostereate, a fatty acid from vegetable source. This emulsifier is broadly authorized in food products around the world and has a proven record of safety demonstrated by its E number (E491).

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.

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

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 legislation in the European Union* Viniflora® JAZZ™ does not contain GMOs and does not contain GM labeled raw materials**. In accordance with European legislation on labeling of final food products** we can inform that the use of Viniflora® JAZZ™ does not trigger a GM labeling of the final food product. Chr. Hansen's position on GMO can be found on: www.chr-hansen.com


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

| 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 SO₂ | 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