Bravo is a high glycerol producing strain specifically developed for classical red winemaking. This strain also produces high levels of ester compounds and is able to release bound grapes volatiles as a result of its beta-lyase enzymatic activity. Wine produced by Bravo will reveal nuances of red fruit (strawberries, cherries) and rich dark fruit (plum and prunes) with very good intensity. Overall produces elegant wines with complexity and good acidity, Bravo is MLF compatible and can handle a wide range of temperatures.

Bravo is recommended for enhancing smoothness and mouthfeel. It adds aromatic complexity for long ageing wines where post fermentative extraction is important. For youthful red wines, where fruit preservation is key, glycerol will play an important palate-balancing role. The strain is recommended for Nebbiolo, Bordeaux style Cabernet Sauvignon, Malbec, Carmenere, cool climate Syrah and Petit Verdot.

<table>
<thead>
<tr>
<th>Glycerol</th>
<th>Adante</th>
<th>Maestoso</th>
<th>High Glycerol Commercial Strain</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

**Recommended Varietals:**
- Nebbiolo
- Cabernet Sauvignon
- Malbec
- Carmenere
- Syrah
- Petit Verdot

**TECHNICAL CHARACTERISTICS**

- **Kinetics**: Moderate to Fast
- **Optimal Temperature**: 16 °C to 30 °C
- **Cold Tolerance**: 13 °C
- **Alcohol Tolerance**: 17%
- **Nitrogen Requirements**: Moderate
- **Killer Factor**: Neutral
- **Flocculation**: High

<table>
<thead>
<tr>
<th>Dosage</th>
<th>0.2-0.35 g/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversion Factor**</td>
<td>16.8 g/L</td>
</tr>
<tr>
<td>Glycerol</td>
<td>9.0-11.0 g/L</td>
</tr>
<tr>
<td>Volatile Acidity</td>
<td>Low</td>
</tr>
<tr>
<td>SO₂ Production</td>
<td>Very Low</td>
</tr>
<tr>
<td>H₂S Production</td>
<td>None</td>
</tr>
<tr>
<td>Foam Production</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

**YAN Levels:**
- Low 150-225
- Moderate 225-300
- High 300+

* Once active fermentation has been established.

** Grams of sugar required to produce 1% alcohol (v/v). Varies depending on the sugar and nutrients composition of the must and environmental conditions.
Please follow the Rehydration Instructions to avoid stuck or sluggish fermentations.

Inoculation Rate:
0.2-0.35 g/L (1.7-2.9 lbs/1000 gallons)

Rehydration Instructions:
1. In an inert and sterile container, prepare chlorine-free water at 38-42 °C (100-108 °F) that is 10 times the weight of the yeast to be rehydrated.
2. Gently mix the yeast into the water and allow 20 minutes for rehydration.
3. After rehydration, begin to slowly add full strength juice into the yeast mixture every 5 minutes to allow for acclimation. Do not decrease the temperature of the mixture by more than 5 °C (9 °F) with each juice addition.
4. When the temperature of the yeast suspension is less than 10 °C (18 °F) warmer than the must or juice to be inoculated, slowly add the yeast mixture into the fermentation vessel.

Note: Directly adding dry yeast to the must or juice tank is not advised.