ORIGIN AND APPLICATION
The Cabernet Sauvignon, the Merlot and the Cabernet Franc are widely spread in the world nowadays. According to the soil, the output, the winemaker’s personality and the type of winemaking, the wines made from these grape varieties will have different expressions. They however present dominating and specific characters such as pepper hints (pyrazine aromatic family) for the Cabernet Franc and Cabernet Sauvignon and strawberry jam hints (furaneols family) for the Merlot. To this is to be added a stronger tannic presence.

The Uvaferm BDX™ yeast, isolated in France, which qualities are recognized all around the world, respects these essential components of the Bordeaux grape variety, especially at the varietal aromas level.

Besides, the Uvaferm BDX™ yeast preserves the concentration in phenolic compounds in the wines and allows the winemaker to elaborate wines with strong colors and high total polyphenol levels.

Lallemand has developed a unique yeast production process called YSEO® (Yeast Security and Sensory Optimization). This process increases fermentation reliability and security and ensures fewer organoleptic deviations, but not all yeast can be prepared by this process. The process (when compared to non YSEO®):

- Improves the yeast cells assimilation of essential micronutrients and vitamins.
- Improves the yeasts ability to implant in the must for a more reliable fermentation.
- Linked to a reduction in yeast stress thereby reducing H₂S, VA and SO₂ production.
- Shorter lag phase.
- Improves the resistance and adaption of the yeast under difficult fermentation conditions.

MICROBIAL AND OENOLOGICAL PROPERTIES

- *Saccharomyces cerevisiae var. cerevisiae*
- Sensitive to the competitive factor K2
- High tolerance to alcohol : up to 16%
- Average lag phase
- Moderate fermentation rate allowing long macerations
- Optimum temperature range: 18 to 30°C (64-86°F)
- Average requirement in assimilable nitrogen
- Low ß-glycosidase activity : limits the color losses
- Low production of volatile acidity: 0,20g/L eq (H₂SO₄)
- SO₂ production : between 20 mg and 30 mg/L
- Low foam formation
SENSORY PROFILES AND COLOUR

<table>
<thead>
<tr>
<th>Varieties</th>
<th>Countries</th>
<th>Sensory profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabernet Sauvignon</td>
<td>USA</td>
<td>Dry fruits, olives, round tannins</td>
</tr>
<tr>
<td>Merlot</td>
<td>USA</td>
<td>Ripe fruits, round tannins</td>
</tr>
<tr>
<td>Malbec</td>
<td>Argentine</td>
<td>Dry fruits, truffles</td>
</tr>
</tbody>
</table>

Sensory profiles of wines obtained with the Uvaferm BDX yeast in various wine-growing regions

INSTRUCTION FOR USE

Dosage Rate:
- 25g/hL (2lb/1000gal) of Active Dried Yeast (this will provide an initial cell population of approximately 5 x 10^6 viable cells/mL)
- 30g/hL (2.4lb/1000gal) of Go-Ferm Protect Evolution™
- Nitrogen source from the Fermaid™ range

Procedure for 1000L (264gal) ferment.
1) Add 300g (10.6oz) of Go-Ferm Protect Evolution™ to 6L (1.5gal) of 40-43°C (104-110°F) clean, chlorine free water. Stir until an homogenous suspension free of lumps is achieved.
2) When the temperature of this suspension is between 35-40°C (95-104°F), sprinkle 250g (8.8oz) of yeast slowly and evenly onto the surface of the water, whilst gently stirring. Ensure any clumps are dispersed.
3) Allow to stand for 20 minutes before further gently mixing.
4) Mix the rehydrated yeast with a little juice, gradually adjusting the yeast suspension temperature to within 5-10°C (9-18°F) of the juice/must temperature.
5) Inoculate into the must.

Further Notes
- Steps 1-5 should be completed within 30 minutes.
- It is best to limit first juice/must volume addition to one tenth the yeast suspension volume and wait 10 minutes before the addition to juice.
- To minimize cold shock, ensure temperature changes are less than 10°C (18°F).
- It is recommended that juice / must be inoculated no lower than 18°C (64°F).
- It is recommended to use complex nutrition source, such as Fermaid.