
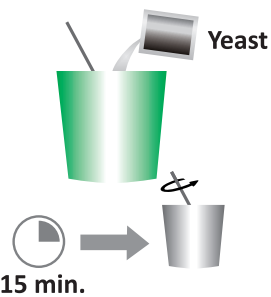

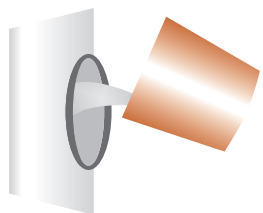


Easy Steps for Optimal Yeast Rehydration of Lallemand Yeast

Proper yeast rehydration is one of the most important steps to help ensure a strong and healthy fermentation. Normal inoculation for wine active dried yeast is 2 lb/1000 gal (25 g/hL). When added properly, a 2 lb/1000 gal (25 g/hL) addition of wine active dried yeast results in an initial cell concentration of 3-4 million viable cells per milliliter of must (juice). Under favorable conditions, the initial cell population may increase up to 100-150 million viable cells per milliliter of must (juice) before growth stops and alcoholic fermentation begins. This biomass increase is critical for healthy fermentations. When harvesting grapes at high maturity levels, increased inoculation rates are recommended. When using higher rates, be sure to maintain a ratio of 1 part yeast to 1.25 parts yeast rehydration nutrient. Careful rehydration, atemperation and inoculation are all important to help prevent sluggish or stuck fermentations.

<p>Yeast Rehydration Nutrient</p> 	<p>1</p> <p>Suspend 2.5 lb/1000 gal (30g/hL) of Go-Ferm or Go-Ferm Protect in 20 times its weight of clean, chlorine free, 43°C(110°F) water. (For example: 2.5 lb rehydration nutrient x 20 = 50 / 8.33 lb/gal water = 6 gal water.) If the water temperature is not high enough, the yeast rehydration nutrient may not go entirely into solution. IMPORTANT: If not using a yeast rehydration nutrient, water temperature should begin at 40°C(104°F) to avoid harming the yeast.</p>
 <p>Yeast</p> <p>15 min.</p>	<p>2</p> <p>Once the temperature of the yeast rehydration nutrient solution has dropped to 40°C(104°F), add 2 lb/1000 gal (25 g/hL) of active dried yeast. Stir gently to break up any clumps. Let suspension stand for 15-30 minutes, then stir gently again. Live yeast populations decline when allowed to stand for more than 30 minutes.</p> <p>Note: Foaming is not an indicator of yeast viability.</p>
	<p>3</p> <p>Slowly (over a period of 5 minutes) combine an equal amount of the must (juice) to be fermented with the yeast suspension. This will help the yeast adjust to the cool temperature of the must (juice) and will help avoid cold shock caused by a rapid temperature drop exceeding 10°C(18°F). This atemperation step may need repeating for very low temperature must (juice). Each atemperation step should last about 15-20 minutes. For every 10°C(18°F) temperature difference between the must (juice) and the yeast slurry, an atemperation step must be performed. For example, for a must (juice) temperature of 20°C(68°F) and yeast slurry temperature of 40°C(104°F), two atemperation steps are required.</p>
	<p>4</p> <p>Add the yeast slurry to the bottom of the fermentation vessel just as you begin filling the vessel with must (juice). This is especially important for large tanks with long filling times or when inoculating with strains that are sensitive to the competitive factor. This will allow the yeast a head start over indigenous organisms.</p>