

## Whole Cluster Pinot Noir Fermentation

Whole cluster fermentation imparts unique characteristics in Pinot Noir and all red wine, as it allows the grapes to create some alcohol in their cells without the addition of yeast (referred to as “intracellular fermentation”), giving them distinct fruity aromas. ATPGroup has a range of products that can be used at various stages of the winemaking process to ensure success of whole cluster fermentation.

Timing	Product	Dosage	Use
Harvest	<b>MustGuard</b>	2 lb/ton	Prevents oxidation during harvest
Pre-fermentation	<b>Color-Tan</b>	10–20 g/hL	Rapidly stabilizes color when added during fermentation
Cold Soak	<b>Zyme-O-Color Plus</b>	16–24 mL/ton	Developed for the maceration and color extraction of red grapes
Filling the Tank	<b>SpringFerm</b>	20 g/hL	Fermentation activator 3 times richer in available nitrogen than basic inactivated yeast
	<b>UCLM S377</b>	20 g/hL	Used on structured red wines to increase color extraction
	<b>SpringCell Color</b>	20 g/hL	Developed to increase the intensity and stability of color and roundness in red wines
Co-inoculation	<b>Malo-Plus</b>	As indicated on package label	With whole cluster fermentation, the stems release polyphenols and tannins that, together with high alcohol, can inhibit MLF. Co-inoculation for MLF avoids this problem, making it easier and faster with more complex aromatics and fewer problems with off-flavors. Add 12–24 hours after the start of primary fermentation.
1/3 Sugar Depletion	<b>SpringFerm Complete</b>	15–20 g/hL	Complex fermentation activator based on the synergies of organic and mineral nitrogen. Add 10–15 ppm/day of pure oxygen when adding <b>SpringFerm Complete</b> or pump over with aeration. Additionally, when 7-8% alcohol is achieved, add 8 g/hL <b>Tani-Heritage</b> , then pure oxygen (2–4 ppm/day) through the end of fermentation.
After MLF	<b>SpringCell Manno</b>	20–40g/hL	Yeast polysaccharides that add roundness and mouthfeel to the wine

For more information on managing whole cluster fermentation or for assistance with your specific requirements, please contact your ATPGroup Enology Products Specialist.