
CHARDONNAY WINES STYLES

Chardonnay is a very versatile grape varieties that can be made in many different styles. Of course, the picking decision and vineyards practices and location will impact highly the grapes quality and potential. The winemaking approach can also have a great impact on the final wine style. Here some guidelines and recommendations

//FOCUS PRODUCTS

Excellence B-Nature – non-Saccharomyces yeast, pure *Metschnikovia pulcherrima*, non fermentative. It inhibits the development of spoilage microbes such as other non-Saccharomyces, and bacteria on grapes and juice. Excellence® B-Nature® is an organic anti-microbial solution, used as alternative to SO₂ on grapes. It protects grapes/juice from microbial contamination during transport and processing, does not inhibit *Saccharomyces cerevisiae*, and reduces SO₂ combining compounds production, thus increasing SO₂ efficiency. Excellence B-nature can be added directly to grapes, without rehydration. Simply sprinkle the yeast on the top of the grapes at picking.

Tanin gallique a l'alcool – pure gallic tannin, developed for whites and roses, to scavenge oxygen radicals and inhibit oxidative enzymes such as laccase and PPO. It protects grapes and juice from oxidation. It has strong affinity with proteins, improving protein stability, thus reducing the needs of bentonite on wine. Tannin Gallique a l'alcool can be added directly on grapes or in juice. Simply sprinkle it on the top of the grapes at picking.

Polymix Natur' – PVPP, Yeast extracts, Bentonite. Vegan, allergen free fining agent focused on removing oxidized and easily oxidable phenolic compounds. Polymix Natur' treats and prevents oxidation, improves oxidative stability, wine expression and elongates wine shelf life. We recommend using Polymix Natur' at juice stage, in prevention. It can also be used during fermentation and on wine during ageing.

Aroma Protect - inactivated yeasts, naturally rich in glutathione, a natural antioxidant, sulfurous tripeptide with great reductive power. When used during ageing, Aroma Protect® gives immediate protection against the oxidative mechanisms, releasing glutathione (GSH) into the wine, significantly slowing down oxidation phenomena.

KillBrett – pure chitosan, wide spectrum anti-microbial agent. KillBrett eliminates and inhibits Brettanomyces, Lactic Acid Bacteria and Acetic Acid Bacteria. It can be used during the entire process of winemaking, we recommend using it as preventive, post MLF, at 4 g/hL.

Tan&Sense Volume – pure untoasted oak tannins, with high capacity to scavenge oxygen radicals, buffer redox potential and maintain wine freshness. Tan&Sense Volume, is a gentle tannin, increasing sweetness and roundness perception. We recommend using 0.5 – 1 g/hL every transfer, racking or movement of the wine to protect from oxidation.

//CHARDONNAY – THIOLIC, FRESH, CITRUS, CRISPY.

<p>HARVEST AND GRAPE TRANSPORT</p>	<ul style="list-style-type: none"> • Picking date will impact strongly wine style. For mineral wines, favor high ratio malic/tartaric acid, low pH and a bit of vegetal characters. • Protection against oxidation: enzymatic reactions are mainly responsible for oxidation in juice, causing loss of polyphenols, browning, production of vegetal characters and loss of varietal aromas. Work fast, at low temperature and protect from oxygen with inert gas and use Tanin gallique a l'alcool at 50 g/ton, at picking or during fruit processing to protect grapes and juice from oxidation and improve protein stability. • Excellence B-Nature at 50 g/ton, sprinkle directly on grapes, as soon as possible after picking to prevent any microbial contamination and spoilage • OPTION: SO₂ 3-4 g/hL at picking or during fruit processing
<p>MACERATION / PRESSING</p>	<ul style="list-style-type: none"> • Oenozym Crush White at 25 mL/ton, at press filling, to improve aromatic precursors and polysaccharides extraction, increase free run yield (3-6%), improve clarification and wine filterability. • Whole cluster, direct pressing is recommended to limit oxidations. • Press program should allow a slow increase in pressure with minimum rotations (Cremant cycle). Press fractions separation: press cut around 1 bar.
<p>CLARIFICATION</p>	<p>Fining is essential to eliminate oxidized and oxidable phenolic compounds and stabilize wine. Fining is essential to eliminate oxidized and oxidable phenolic compounds and stabilize wine.</p> <ul style="list-style-type: none"> • Low pressure fractions: Polymix Natur' at 20 g/hL • Hard press fractions: Polymix Natur' at 40 g/hL <p>Turbidity: 300 NTU to optimize varietal aromas production and mineral expression</p>
<p>ALCOHOLIC FERMENTATION</p>	<ul style="list-style-type: none"> • Temperatures: 60-64°F from beginning to 2/3 fermentation, 58°F from 2/3 to end fermentation • Excellence FTH at 20 g/hL to produce thiolic wines with a fresh, crisp and mineral profile. • OptiThiols at 20 g/hL to stimulate the production of thiolic compounds responsible for 'flinty' and mineral characters • Rehydrate yeast with OenoStim at 20 g/hL to reinforce yeast activity, limit fermentation risks and optimize grape expression. • Ensure good yeast nutrition for a healthy fermentation without off-flavors production: Optiflore O at 40 g/hL at the beginning of fermentation. If initial YAN is low, we recommend adding OptiFerm at 1/3 of the fermentation. • For protein stability improvement, add 20 g/hL of Bentosol Poudre during fermentation
<p>AGEING</p>	<ul style="list-style-type: none"> • MLF is not recommended to maintain wine fresh and thiolic. • Rack off gross lees after fermentation using inert gas. Ageing on fine lees with limited stirring. • Use KillBrett at 4 g/hL to prevent any microbial development and protect wine from spoilage. • Maintain oxidation protection and lower redox potential with Aroma Protect at 10 g/hL

//CHARDONNAY – STONEFRUIT, FRESH, FLORAL.

<p>HARVEST AND GRAPE TRANSPORT</p>	<ul style="list-style-type: none"> • Protection against oxidation: enzymatic reactions are mainly responsible for oxidation in juice, causing loss of polyphenols, browning, production of vegetal characters and loss of varietal aromas. Work fast, at low temperature and protect from oxygen with inert gas and use Tanin gallique a l'alcool at 50 g/ton, at picking or during fruit processing to protect grapes and juice from oxidation and improve protein stability. • Excellence B-Nature at 50 g/ton, sprinkle directly on grapes, as soon as possible after picking to prevent any microbial contamination and spoilage • OPTION: SO₂ 3-4 g/hL at picking or during fruit processing
<p>MACERATION / PRESSING</p>	<ul style="list-style-type: none"> • Oenozym Crush White at 25 mL/ton, at press filling, to improve aromatic precursors and polysaccharides extraction, increase free run yield (3-6%), improve clarification and wine filterability. • Whole cluster, direct pressing is recommended to limit oxidations. • Press program should allow a slow increase in pressure with minimum rotations (Cremant cycle). Press fractions separation: press cut around 1 bar.
<p>CLARIFICATION</p>	<p>Fining is essential to eliminate oxidized and oxidable phenolic compounds and stabilize wine. Fining is essential to eliminate oxidized and oxidable phenolic compounds and stabilize wine.</p> <ul style="list-style-type: none"> • Low pressure fractions: Polymix Natur' at 20 g/hL • Hard press fractions: Polymix Natur' at 40 g/hL <p>Turbidity: 150 NTU to optimize varietal aromas production and mineral expression</p>
<p>ALCOHOLIC FERMENTATION</p>	<ul style="list-style-type: none"> • Fermentation temperatures: 55-58°F • Excellence STR at 20 g/hL to produce fruity, floral and terpenic wines with fresh profile. • OptiThiols at 10 g/hL to improve anti-oxidation resistance and maintain freshness. • OptiEsters at 20 g/hL to promote the production of ethylesters, stonefruit and enhance floral characters. • Rehydrate yeast with OenoStim at 20 g/hL to reinforce yeast activity, limit fermentation risks and optimize grape expression. • Ensure good yeast nutrition to have a healthy fermentation without off-flavors production with Optiflore O at 40 g/hL at the beginning of fermentation. If initial YAN is low, we recommend adding OptiFerm at 1/3 of the fermentation. • Integrate oxygen during peak of yeast activity via open pump-over or macro-oxygenation ~ 10 mg/L • For protein stability improvement, add 20 g/hL of Bentosol Poudre during fermentation
<p>AGEING</p>	<ul style="list-style-type: none"> • MLF is not recommended • Rack off gross lees after fermentation using inert gas. Ageing on fine lees with limited stirring. • Use KillBrett at 4 g/hL to prevent any microbial development and protect wine from spoilage. • Maintain oxidation protection and lower redox potential with Aroma Protect at 10 g/hL

//CHARDONNAY – TROPICAL, COMPLEX, ROUND – POSSIBLE BARREL FERMENT.

HARVEST AND GRAPE TRANSPORT	<ul style="list-style-type: none"> • Protection against oxidation: enzymatic reactions are mainly responsible for oxidation in juice, causing loss of polyphenols, browning, production of vegetal characters and loss of varietal aromas. Work fast, at low temperature and protect from oxygen with inert gas and use Tanin gallique a l'alcool at 50 g/ton, at picking or during fruit processing to protect grapes and juice from oxidation and improve protein stability. • Excellence B-Nature at 50 g/ton, sprinkle directly on grapes, as soon as possible after picking to prevent any microbial contamination and spoilage • OPTION: SO₂ 3-4 g/hL at picking or during fruit processing
MACERATION / PRESSING	<ul style="list-style-type: none"> • Oenozym Crush White at 25 mL/ton, at press filling, to improve aromatic precursors and polysaccharides extraction, increase free run yield (3-6%), improve clarification and wine filterability. • Whole cluster, direct pressing is recommended to limit oxidations. • Press program should allow a slow increase in pressure with minimum rotations (Cremant cycle). Press fractions separation: press cut around 1 bar.
CLARIFICATION	<p>Fining is essential to eliminate oxidized and oxidable phenolic compounds and stabilize wine. Fining is essential to eliminate oxidized and oxidable phenolic compounds and stabilize wine.</p> <ul style="list-style-type: none"> • Low pressure fractions: Polymix Natur' at 20 g/hL • Hard press fractions: Polymix Natur' at 40 g/hL <p>Turbidity: 250-300 NTU to optimize varietal aromas production and mineral expression</p>
ALCOHOLIC FERMENTATION	<ul style="list-style-type: none"> • Fermentation temperatures: 64-70°F • Excellence TXL at 20 g/hL to produce thiolic wines with complex, rich and 'sweet' tropical notes. • OptiThiols at 20 g/hL to stimulate the production of thiolic compounds responsible and improve anti-oxidation resistance • OptiEsters at 10 g/hL to promote the production of ethylesters, pineapple, tropical and enhance floral characters. • Rehydrate yeast with OenoStim at 20 g/hL to reinforce yeast activity, limit fermentation risks and optimize grape expression. • Ensure good yeast nutrition to have a healthy fermentation without off-flavors production with Optiflore O at 40 g/hL at beginning of fermentation. If initial YAN is low, we recommend adding OptiFerm at 1/3 of the fermentation. • To improve mouthfeel, and increase roundness, add Natur'Soft at 20 g/hL (yeast derivatives rich in mannoproteins) toward the end of fermentation • Integrate oxygen during peak of yeast activity via open pump-over or macro-oxygenation ~ 10 mg/L • For protein stability improvement, add 20-30 g/hL of Bentosol Poudre during fermentation
MLF	<p>If desired, add Oeno1 at 1g/hL in co-inoculation (~72 hrs after yeast addition) or once AF is completed</p>
AGEING	<ul style="list-style-type: none"> • Rack off gross lees after fermentation using inert gas. Ageing on fine lees with limited stirring. • Use Tan&Sense Volume at 0.5 g/hL (pure untoasted oak tannins) every racking to protect from oxidation, regulate redox potential and scavenge oxygen radicals. • Maintain oxidation protection and lower redox potential with Aroma Protect at 10 g/hL