THIOLS – WHITES/ROSES

Volatile Thiols are organosulfur based compounds, responsible for grassy, boxwood, grapefruit, passion fruit, citrus, white peaches, tropical, guava, blackcurrent and acacia flowers.
Grape Varieties: Sauvignon Blanc, Chardonnay, Colombard, Grenache Blanc, Pinot Gris, Pinot Blanc, Riesling and Semillon. They can also be found in red cultivars such as Grenache Noir, Cabernet Sauvignon, Merlot and Syrah. Thiolic compounds are present as nonaromatic precursors in the grape skin. Their production and expression in wines can be enhanced through viticultural practices and optimized via the winemaking process.

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 SO_2 on grapes. It protects grapes/juice from microbial contamination during transport and processing, does not inhibit *Saccharomyces cerevisiae*, and reduces SO_2 combining compounds production, thus increasing SO_2 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.

GreenFine Must– Pure pea protein, vegan, allergen-free fining agent used to prevent and treat oxidation. It helps preventing and eliminating oxidation by removing phenolic compounds and yellow shades from musts. GreenFine® Must is a clarifying agent that gives rapid and compact sedimentation. It is a versatile alternative to casein, gelatin and PVPP.

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.

Solutions for winemaking
LAMOTHE-ABIET

WINEMAKING GUIDELINES

THIOLS WHITES/ROSES – WINEMAKING GUIDELINES

HARVEST AND GRAPE TRANSPORT	Thiol precursors are located in grape skins; therefore skin contact is highly beneficial. Cool harvesting and gentle extraction with enzymes are helpful. Protection from oxidation is essential. **Work fast, at low temperature** and **protect from oxygen with inert gas**. **Tanin gallique a l'alcool, 50 g/ton**, at picking or during fruit processing. SO_2 at picking to protect grapes from oxidation and microbial spoilage. *Optional:* **Excellence B-Nature at 30-50 g/ton**, sprinkle directly on grapes, as soon as possible after picking to prevent any microbial contamination and spoilage.
MACERATION / PRESSING	**Oenozym Crush White at 25 mL/ton,** on grapes, at press filling to improve aromas and polysaccharides extraction, increase free run yield, improve clarification, and wine filterability. Protect from oxidation during pressing with **Bucher Inertys** presses or **inert gas** through the entire press cycle (dry ice: 1-2 kg/ton). Press program should allow a slow increase in pressure with minimum rotations. Press fractions separation: press cut to be decided by tasting, conductivity or pH increase.
CLARIFICATION	Fining is essential to eliminate oxidized and oxidable phenolic compounds and stabilize wine. **GreenFine Must** and **Polymix Natur'** both will treat and prevent oxidation, improve oxidative stability, wine expression and elongates wine shelf life. For gentler fining, more focused on 'yellow' color removal, choose the GreenFine Must. To eliminate more 'red' color chose Polymix Natur. - Low pressure fractions: **Polymix Natur' or GreenFine Must at 20 g/hL** - Hard press fractions: **Polymix Natur' or Greenfine X-Press at 40 g/hL**
ALCOHOLIC FERMENTATION	Turbidity: 200-250 NTU, Temperature: 62-66°F **Excellence FTH at 20 g/hL** to produce thiolic, citrus, fresh wines with linear mouthfeel. **OptiThiols® at 30 g/hL** to stimulate thiolic compounds production and increase wine's antioxidant potential. Rehydrate yeast with **OenoStim at 30 g/hL** to reinforce yeast activity, increase aromatic production and optimize grape expression. Ensure good yeast nutrition and limit off-flavors production with **Optiflore O® at 40 g/hL** (complete organic nutrient based on inactivated yeast).
	AT 1/3 FERMENTATION If low initial YAN (<150), add **20-30 g/hL of OptiFerm** (ammonium salts and vitamin B1). For protein stability: **10-40 g/hL of Bentosol Poudre** To boost expression to thiolic compounds, use **Oenozym Thiols** at 3 mL/hL.
AGEING	Once AF completed: rack off gross lees after fermentation. Use inert gas during transfer. **Aroma Protect at 15 g/hL** to reduce redox potential and increase natural wine resistance to oxidation. **KillBrett at 4 g/hL** to prevent any microbial development and protect wine from spoilage.