Solutions for winemaking
LAMOTHE-ABIET

WINEMAKING GUIDELINES

NO/LOW SO_2 WINEMAKING – RED WINES

SO_2 is one of the most controversial additives currently used in the wine industry. Lamothe-Abiet offers options able to replace SO_2 for its antioxidant, antioxidasic and antimicrobial activities and produce quality, low or SO_2 –free wines. The entire process of winemaking must be review, especially sanitation and oxygen protection, using appropriate equipment and sanitation protocols.
Critical steps for reducing use of SO_2 in white and rose wines:

- **pH management**: Bacteria are pH sensitive and will be under better control in a low pH environment.
- Work with healthy grapes.
- **Dissolved oxygen management is essential**: limit transfer, use inert gas and work with appropriate equipment.
- **Be proactive:** prevent microbial contamination from grapes stages, preserve and build up antioxidant wine potential.

ALTERNATIVES TO SO_2 – PRODUCT INFO

Pro Tanin R – Pro-anthocyanidin tannin, use as sacrificial tannin. Developed for application on red grapes, to scavenge oxygen radicals, inhibit oxidative enzymes such as laccase and PPO and eliminates reactive proteins, thus protecting grape polyphenols. Pro tannin R is instantaneously soluble, simply sprinkle it on the top of the grapes at picking.

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.

Softan Vinification – catechins tannins bounded to plant polysaccharides. Added during fermentation, Softan Vinification has a strong ability to stabilize color and protect it from loss during fermentation. It is a gentle tannin that contributes to mouthfeel and build up mid-palate

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.

Solutions for winemaking
LAMOTHE-ABIET

WINEMAKING GUIDELINES

NO/LOW SO_2 RED WINE – WINEMAKING GUIDELINES

HARVEST AND GRAPE TRANSPORT	**Pro Tanin R, 150-180 g/ton**, at picking or during fruit processing to protect from oxidation and inhibit oxidative enzymes. **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.
COLD SOAK / MACERATION	*Optional:* **20-30 mL/ton of Oenozym Crush Red.** Maceration enzyme, purified from cinnamyl esterase and anthocyanase to improve grape skin compounds extraction, and free-run yield. It will also improve clarification and wine filterability.
ALCOHOLIC FERMENTATION	Fresh, Fruity, Soft and Balanced mouthfeel - Temperature: 72-80°F - **Excellence DS at 20 g/hL** to produce fruity, fresh and elegant aromatic profile with smooth structure. - **OptiEsters at 20 g/hL** to promote the production of ethylesters and enhance fresh, fruity and floral characters. Elegant, Terroir driven, Powerful and Structured Mouthfeel - Temperature: 85-90°F - **Excellence XR at 20 g/hL** to produce powerful, structured, and elegant aromatic profile with smooth structure. Rehydrate yeast with **OenoStim at 25 g/hL** to reinforce yeast activity, increase aromatic production and optimize grape expression.
	AT 1 DAY AFTER INOCULATION Ensure good yeast nutrition and limit off-flavors production with **Optiflore O® at 40 g/hL** (complete organic nutrient based on inactivated yeast). **150 -180 g/ton of Softan Vinification** (catechins and plant polysaccharides) to encourage the stabilization of anthocyanins via co-pigmentation and condensation and protect anthocyanins.
	AT 18 BRIX If low initial YAN (<150), add **20-30 g/hL of OptiFerm** (ammonium salts and vitamin B1) at 1/3 of fermentation. **150 g/ton Natur'Soft** to stabilize color, fill-up mid palate and increase wine length and volume.
PRESSING	Optional: **10 g/hL Vinitan Advance** to free run to reinforce wine structure and oxidation resistance and improve color stabilization.
MLF	Co-inoculation: add **Oeno1 at 1g/hL,** 1 day after AF starts to keep fresh, fruity profile. Sequential inoculation: add **Oeno1 at 1g/hL** after AF is completed for more complex profile.
AGEING	Once AF and MLF completed: rack off gross lees after fermentation. Use inert gas during transfer. **Aroma Protect at 10-20 g/hL** to reduce redox potential and increase natural wine resistance to oxidation. **Tan&Sense Volume at 1 g/hL** every racking to protect from oxidation and scavenge oxygen radicals. **KillBrett at 4 g/hL** to prevent any microbial development and protect wine from spoilage.