



STEP	PRODUCT	DOSE (g/hl)	Composition	Properties
Harvest				
Sulfiting	EFFERBAKTOL	3 g/hl	Potassium metabisulfite (effervescent)	Limit the time between picking and treatment of the harvest.
Addition of tannins (o)*	VITANIL® B	5 g/hl	Galic Tannins	Homogeneous sulfiting in the skip (effervescence). Limits the oxidation of the must. <i>Powerful antioxidant for white and rosé wines.</i>
Reception				
Direct pressing				No maceration to avoid alterations & diffusion of off flavord in the juice
Sulfiting	SO ₂	7-10 g/hl	Potassium bisulfite	Antioxidant, preservative.
Cold static settling	Cold treatment	8-12°C < 100 NTU		
Enzymatic treatment (o)*	VIAZYM® FLUX	3-4 ml/hl	Glucanases + pectinases	<i>Specific enzymes breaking down pectins + glucans and promoting clarification.</i>
Fining	CARBINE T (o)*	20 - 100 g/hl	Deodorizing charcoal	Action on moldy earthy vegetal notes (powdery mildew / Botrytis / geosmine).
	POLYGREEN	60-80 g/hl	Pea, PVPP, bentonite, cellulose	Removal of oxidized and oxidisable polyphenols.
	ELECTRA®	30-40 g/hl	Bentonite	Removal of the polyphenol oxidases (PPOs).
Flotation : to be favored when possible				
Enzymatic treatment (o)*	VIAZYM® FLUX	3-4 ml/hl	Glucanases + pectinases	<i>Specific enzymes breaking down pectins + glucans and promoting clarification.</i>
Fining	CAPTIVA (o)*	40 - 60 g/hl	Deodorizing charcoal	Action on moldy earthy vegetal notes (powdery mildew / Botrytis / geosmine).
	ELECTRA®	30 g/hl	Bentonite	Removal of the polyphenol oxidases (PPOs).
	KTS® FLOT	5-15 cl/hl	Vegetal proteins & Chitosan	Great results on compaction and clarification (long-term effect).
AF				
Yeasting	SO® DELIGHT	20 g/hl	LSA	Aromatic yeast with great fermentation capacities. T° AF = 17°C / 20°C when d<1010
Nutrition	NUTRICELL® INITIAL	20 g/hl	Yeast derivatives	Yeast starter. Sterols, amino acids, vitamins, minerals and survival factors. Difficult AF conditions. <u>To be added to the yeast rehydration water.</u>
Enf of AF d<1000		Full tanks		Avoid the oxidation of wines.
Wine fining	KTS® FLOT	5 cl/hl	Vegetal proteins & Chitosan	Quick clean-up.
Bottling				
Addition of tannins	VITANIL® B	10-15 g/hl	Galic Tannins	Powerful antioxidant for white and rosé wines.

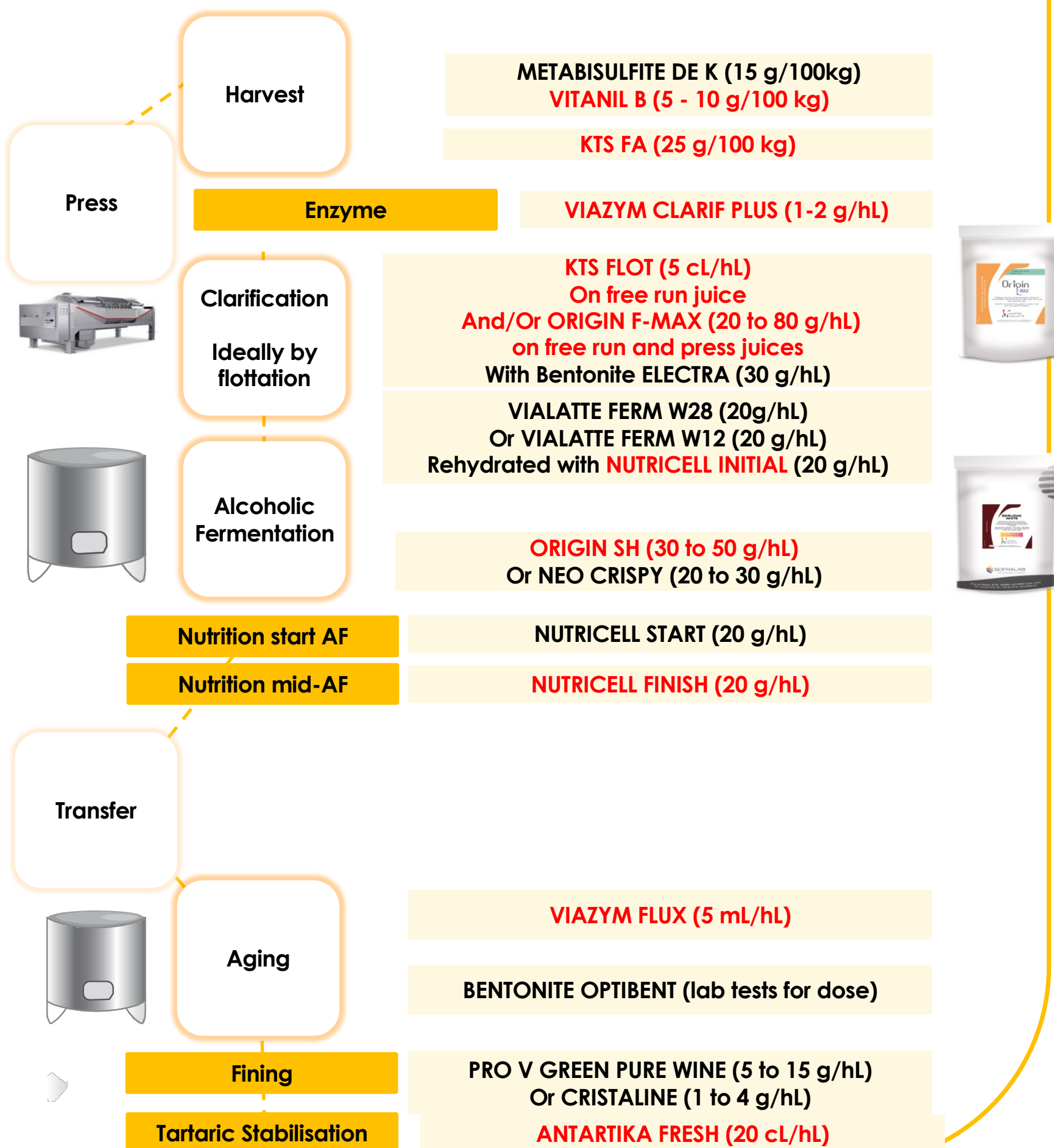
(o)* : addition of oenological product is optionnal, depending on the matrix and targeted wine.



A grape-rotten and other possible microbiological deviations grape harvest presents risks of **nitrogen and vitamin deficiencies**, **organoleptic deviations** due to botrytis or moldy-earthy (Gmt) tastes, **oxidation** or **difficult filtration**.

Due to heavy rains the wine may be **diluted** and have a **lack of body and volume**

Botrytis may sometimes be combined with Acid Rot issues (*Drosophila Suzukii*), then the volatile acidity could be much higher than normal : the use of **KTS FA** is highly recommended to minimize VA.

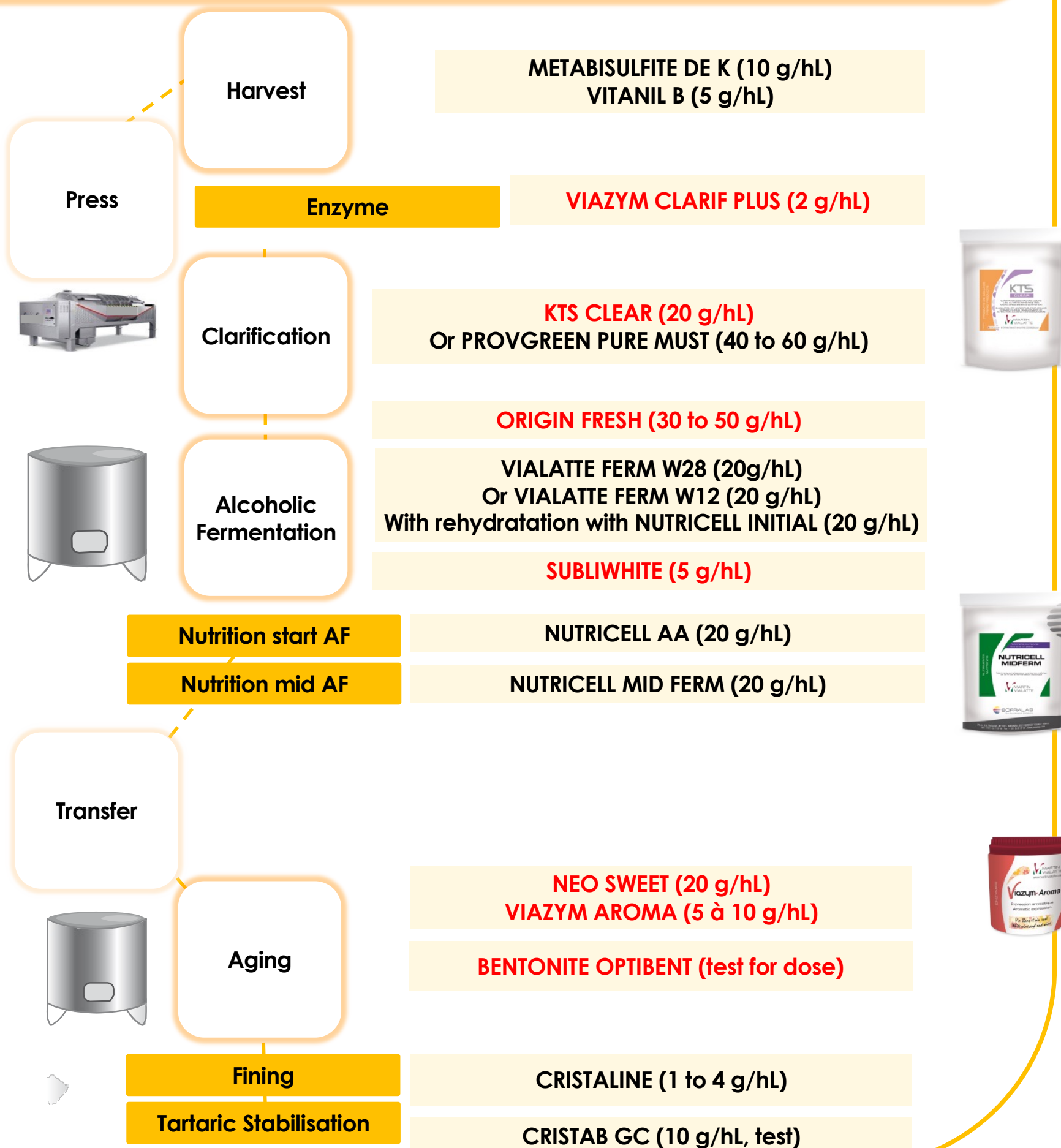




The mildew will have a **negative impact on the flavors** from 5% of contaminated grapes, the wine will be rejected by the consumer from 15%. **Vegetable flavors** are developed, a decrease in fruity, an **increase in the hardness of tannins**. The work on must is essential to clean it of its bad taste, and make a **strong and fast clarification** (sought turbidity: 50 NTU).

To control oïdum and mildew mosaic it is recommended to treat copper lately. However it is known **copper implies negative effects on oxidation and aromatic losses** (thiols).

A new oenological solution now makes it possible to reconcile protection of the vineyard with the aromatic quality of the wine: **ORIGIN FRESH**.





STEP	PRODUCT	DOSE (g/hL)	COMPOSITION	PROPERTIES
TANK FILLING				
Tank inerting	CO ₂	Gas mat 40 cm	CO ₂ (g)	Protection / oxidation
Sulfites addition	SO ₂	5-6 g/hL	Potassium Bisulfite	Antioxidant and conservative
Tannins addition	TANIXEL	30-50 g/hL	Chestnut tree tannin	Powerful antioxidant. Reacts with PPO
Enzyme addition	VIAZYM EXTRACT	2 g/hL	Extraction enzyme	Fast polyphenol extraction to limit vatting time. (To be added separately from tannins & sulfite)
AF				
Yeasting	VIALATTE FERM R71	20 g/hL	ADY	Specific yeast (important production of esters), strong yeast with good fermentative capacity. Objective: secure AF by ensuring fast and complete AF. T° AF = 23°C
Nutrition	NUTRICELL INITIAL	20 g/hL	Yeasts derivatives	Yeast nutrient. Sterols, amino acids, vitamins, minerals and survival factor. AF difficult conditions. <u>To be added during preparation of yeast inoculation</u> Objective: control AF
<i>Fining (o)*</i>	CARBINE T (o)*	40-60 g/hL Contact: 48 h	<i>Deodorizer charcoal</i>	On musts and VNEF. Action on vegetal, moldy, earthy notes (oidium / botrytis / Geosmine). 48-72h to avoid release
Oxygenation (density-30 points)	Cliqueur	8-10 mg/L	O ₂	Possibility of microoxygenation during 2-3 days
End AF	CO ₂	Once a day	CO ₂ (g)	Avoid acetic acid formation
Vatting		6-8 days max		Limit maceration
Devatting	Aeration			
Fining				
Centrifugation (when possible)	KTS FLOT	10-15 cL/hL Turbidity < 300 NTU	Pea protein + Chitosan	Wine fining
MLF				
Inoculation	REFLEX MALO HD	18°C < T° < 20°C Kit dose / hL	<i>Oenococcus oeni</i>	Strain for wine with difficult conditions (low pH, high Alcoholic degree)
<i>Enzyme addition (o)*</i>	VIAZYM FLUX	2mL/hL	<i>Glucanases + pectinases</i>	<i>Specific enzymes. Degrade pectins and glucanes (produced by Botrytis) and favor clarification</i>
RACKING				
Sulfite addition	SO ₂	Active SO ₂ = 0,6 mg/L		Ensure wine stability with respect to microorganisms

(o)* : optional addition of enological product, depending on product objective