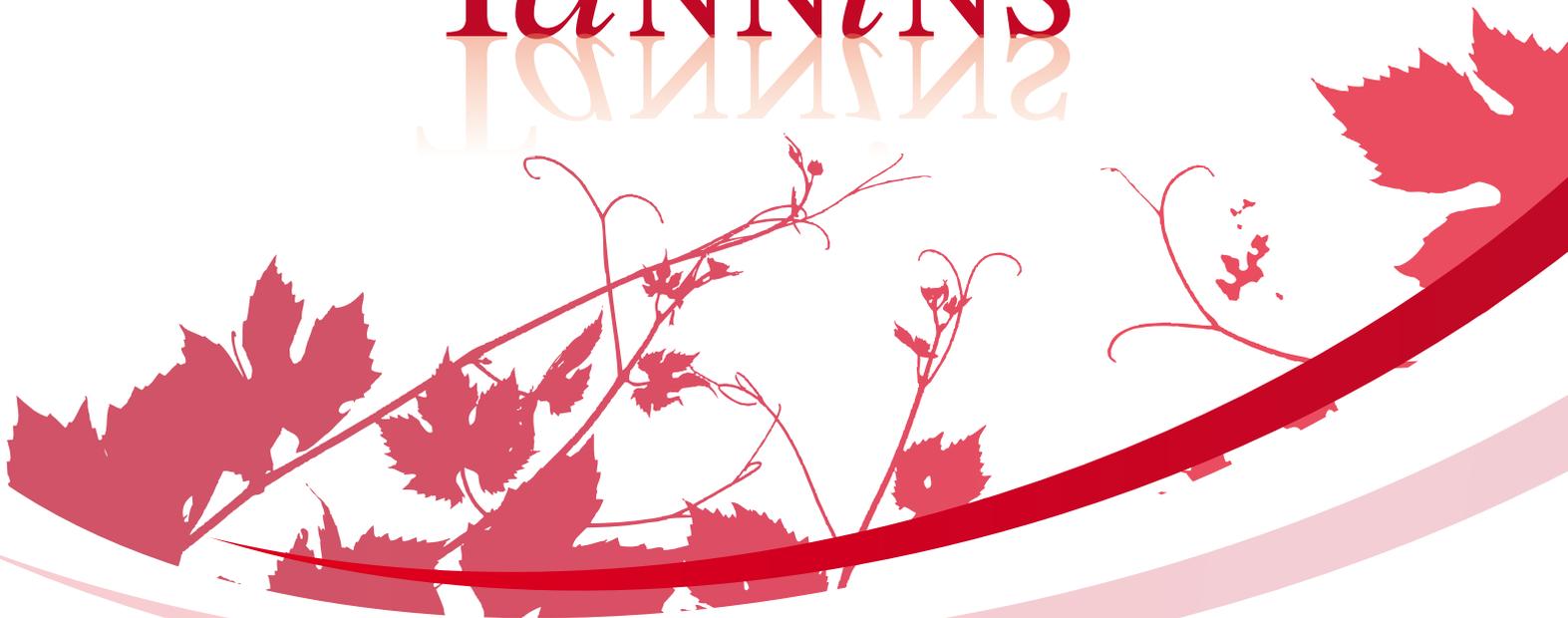




INSTITUT ŒNOLOGIQUE
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ŒNOLOGICAL TANNINS



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Origins and properties

Tannins

Hydrolysable tannins

Ellagic

Chestnut Oak

CHESTNUT

» Used to increase the clarity of wines by fining in tandem with protein fining agents

OAK

» Contributes to the aromaticity and roundness of wines

» Protects against oxidation

Gallic

Tara Gall

» Contributes towards must and white wine clarification

» Limits off-flavours by combining with sulphur compounds

» Protects musts and white wines against oxidation

Condensed tannins (*proanthocyanidic*)

Grape

» Reinforces polyphenolic structure and provides volume and roundness

» Reinforces the wine's aptitude for aging

Quebracho

» Stabilises colouring matter by anthocyanin condensation

» Protects musts by inhibiting the activity of natural oxidation enzymes (Laccase and Tyrosina)

Tannins for red wines

Vinification



VOLUTAN TANIN SR TERROIR TANIN SR

VOLUTAN

(100 % Grape)

For maintaining colouring matter;
Also providing structure,
volume and suppleness

10 to 30 g/hl

VOLUTAN has been specifically selected for stabilising colouring matter. It also provides musts or white wines that present a polyphenolic deficiency with structure, volume and suppleness.

- » It stabilises colouring matter on a long term basis thanks to the formation of Tannin-Anthocyanin combinations.
- » It compensates for the imbalance of tannins found naturally in grapes while also providing volume and suppleness.

TANIN SR TERROIR

50 % Proanthocyanidic
of which 15 % grape
50 % Hydrolyzable

For protection against
oxidation and maintaining
colouring matter

10 to 30 g/hl

TANIN SR TERROIR is specifically formulated to combine the effects of proanthocyanidic and hydrolyzable tannins with no astringency.

- » It regulates oxidation-reduction potential.
- » It protects the colouring material on a long term basis by allowing the formation of covalent bonds with the anthocyanins.

TANIN SR

(100 % Proanthocyanidic)

For maintaining
colouring matter

15 to 40 g/hl

TANIN SR is a 100% proanthocyanidic tannin formulation, intended for colour stabilisation.

- » It stabilises colouring matter on a long term basis thanks to the formation of covalent bonds with anthocyanins.
- » It protects musts by inhibiting the activity of natural oxidation enzymes. (Laccase and Tyrosinase).

Tannins for red wines

Maturing



VOLUTAN
TANIFASE ELEVAGE
TANIN SR TERROIR

VOLUTAN

(100 % Grape :
skin and seed)

For well-balanced wines
and for improving aging potential

From 10 mL/hL

VOLUTAN is a tannin that has been specially formulated to provide structure, volume and suppleness, while also improving the wine's aging potential.

- » It helps correct the wine's polyphenolic deficiency by providing balance, structure and roundness.
- » It reinforces the wines' potential for aging by protecting against oxidation.

TANIFASE ELEVAGE

(Oak)

To emphasise aromatic
expression and roundness
in wines whilst also protecting them
against oxidation.

5 to 30 g/hL

TANIFASE ELEVAGE is a high quality oak tannin that improves the general balance of wines.

- » It subtly improves wine structure, length and aromatic expression.
- » It regulates oxidation-reduction during barrel maturation or during micro-oxygenation.

TANIN SR TERROIR

50 % Proanthocyanidic
of which 15 % grape,
50 % Hydrolyzable

For young red wines
or red wines with
aging potential that present
a structural deficiency

5 to 15 g/hl

TANIN SR TERROIR is specifically formulated to combine the effects of proanthocyanidic and hydrolyzable tannins.

- » It improves wine structure by acting on the midpalate. It helps correct the wine's polyphenolic deficiencies by providing balance, structure and roundness.
- » It reinforces the wine's aging capacity by protecting it against oxidation.

Tannins for white wines

Vinification



TANIN CRISTALLIN

Fining



TANIN TC OU SOLUTION TC

Maturing



EXGRAPE PEL TANIFASE

VINIFICATION

TANIN CRISTALLIN

(Tara)

For improved preservation

5 to 20 g/hL

Le TANIN CRISTALLIN is a formula that gives white wines elegance and structure with no astringency.

- » It protects the musts from natural oxidation by inhibiting laccase and tyrosinase activity.
- » It reinforces the antioxidant capacity of SO_2 and complements its antiseptic effect.

FINING

TANIN TC

(Chestnut extract ellagic tannin)

For simplified fining

7 to 8 cL/hL

Le TANIN TC has been selected for its capacity to form protein tannin complexes while also acting as an antioxidant.

- » By forming a complex with the fining agent, the tannin takes the particles clouding the wine with it as it settles.
- » It complements the antioxidant capacity of SO_2 .

MATURING

ExGrape PEL

(100 % Grape : skin and seed)

For improving balance and aging potential in wines

1 to 5 g/hl

L'EXGRAPE PEL, derived from the skins of white grapes, has been selected for improving taste and balance in wines.

- » It helps compensate the wine's polyphenolic deficiency by refining the structure and also providing roundness.
- » It reinforces the wine's aging capacity by protecting it against.

TANIFASE ELEVAGE

(Oak)

For enhancing aromatic expression and roundness in wines while also protecting them against oxidation

1 to 5 g/hl

Le TANIFASE ELEVAGE is a high quality oak tannin that improves general balance in wines.

- » It subtly improves wine structure, length and aromatic expression.
- » It regulates oxidation-reduction potential during barrel maturation or during micro-oxygenation.

FAQs

"Can't the tannins that I am adding confer bitterness or astringency...?"

Our experience in selecting raw materials and our knowledge of tannins allow us to fully control the quality of our formulations. Organoleptic criteria are monitored extremely carefully by our quality department. Furthermore, they are tested on the wines for which they are intended and often at higher dosages than those recommended. This is to guarantee that they cannot induce organoleptic deviations such as bitterness or astringency.

"Is it really necessary to use tannins to fine my white wines?"

Tannins have the particularity of combining very easily with fining agents, forming a precipitate that takes the particles clouding the wine with it when it sediments. The association of a tannin such as TANNIN TC with a protein fining agent gives excellent results and facilitates later filtrations. As an example, fining with TANNIN TC and Fishangel systematically produces a turbidity level inferior to 5NTU in just a few days. In certain cases, turbidity levels can reach around 1NTU, thus meaning that a filtration can be avoided.

"At what point should tannins be added during white wine vinification?"

As soon as the juice is released, it comes into contact with air and is thus subject to oxidations that lead to polyphenol browning which restricts aromatic expression. The use of tannins as soon as the juice is released enables the antioxidant capacity of the SO_2 to be reinforced and to obtain fresher wines, while also improving sensorial perception.

"What are the main differences between the characteristics of seed and skin tannins?"

Tannins derived from seeds have a low degree of polymerisation and a higher degree of galloylation than skin tannins. This is why grape seed tannins present a higher rate of activity in regard to Tannin-Anthocyanin complexes via the intermediary of acetaldehyde. This is translated into improved stabilisation of red colouring over time.

Tannins derived from grape skins have two main characteristics :

- Improving taste perception: suppleness, volume, balance
- Antioxidant activity

Hence, for red wines it is recommended to use VOLUTAN; a seed and skin tannin, and for white wines, EXGRAP PEL, a tannin extracted from grape skins.

"Which tannin provides the most structure?"

Tannins largely contribute towards the sensation of structure on the palate in wines, to such an extent that the addition of tannins can modify the taster's perception.

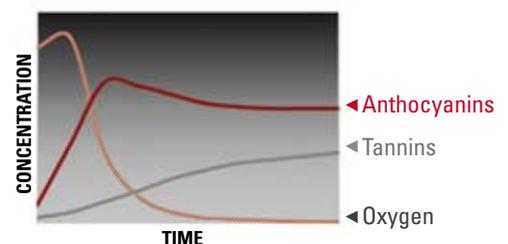
However, it is preferable to use tannins derived from grapes or oak to restructure a wine during maturation.

This is why the IOC has made a tannin sample bank available for red and white wines, so you can define the nature and optimal dosage of your addition. Each dosage corresponds to a 75cl bottle.

"When should tannins be introduced into red wines: at the start or end of maceration?"

Anthocyanins are extracted at the start of fermentation, before the tannins, in unstable forms until they are combined with the tannins. Early addition of condensed tannins promotes condensation and hence long term colour stabilisation. Therefore, it is preferable to introduce the tannins as early as possible during alcoholic fermentation.

Condensed tannins directly contribute towards colour stabilisation by forming stable TANNIN/ANTHOCYANIN complexes by condensation, to the contrary of hydrolyzable tannins.



"What are the benefits of tannins in racking?"

Certain sulphur compounds are responsible for unpleasant aromatic notes in wines, described as rubber, stagnant, rotten egg... These substances are formed by the yeast during "foam" formation from amino acids containing sulphur or following SO_2 transformation. This character strongly diminishes the wine's aroma. Oenological tannins enable the sulphur compounds to be fixed and thus reveal the wine's true aromas, whilst also improving structure and length on the palate.