



Helpful Tools for Managing Overripe Fruit

In regions where climate is hot, grapes can become shriveled or raisined very quickly during harvest season. This raisining introduces difficult situations for winemakers for several reasons. The raisined fruit may have exceptionally high sugar content, which makes analysis for accurate sugar levels difficult and predicting final alcohol content nearly impossible. This same issue may also lead to situations where raisins soak up and release more sugar over time, leading to very high alcohol levels, and subsequent sluggish or stuck fermentations. Additionally, very ripe fruit can lead to raisined flavors or aromas which may be appreciated or not depending on style. Lastly, very often overripe fruit can have lower acidity, which leads to high pH and higher potential for oxidation. The following protocol aims to offer tools and information for mitigating these potential situations.

PROTOCOL

PROCESS	CHALLENGE	RECOMMENDED ENOLOGICAL TOOL	DOSAGE
Grape Reception	Oxidation of color	AST is a blend of ascorbic acid, tannin, and sulfite. This will prevent losses of color due to high pH situations.	150 g/ton
Crush	Difficulty with maceration and eventual clarification	EnartisZym Color Plus contains pectinase activity which will aid in breaking down grape material, improving extraction and clarification capacity post fermentation.	30 g/ ton
Fermentation - inoculation	Overripe fruit may have high pH	EnartisFerm ES U42 is a mix culture of Saccharomyces uvarum and Saccharomyces cerevisiae which produces high levels of succinic acid, lowering pH levels and increasing glycerol levels. Helps with decreasing ripe fruit characteristics.	30 g/hL Read special instructions on rehydration of this unique non- Saccharomyces cerevisae yeast.
Fermentation – 1/3 fermentation progression	overripe fruit can lead to raisin flavors or aromas	Incanto NC Cherry contains precursors for red fruit aromas which can aid in masking raisined characteristics. This blend also aids in improving structure and mid palate which may be lacking in raisined fruit.	30 g/hL
Fermentation – 1/2 fermentation progression	High ethanol content makes for difficult conditions for yeast to continue fermenting	Nutriferm No Stop and Nutriferm Advance will dramatically improve yeast performance in high brix fermentations. Nutriferm No Stop contains a high quantity of sterols which aid in membrane fluidity and protects the yeast in high ethanol conditions. Nutriferm Advance contains cellulose which helps detoxify the fermentation, as well as DAP which is the form of nitrogen yeast need during fermentation.	30 g/hL for both
Post fermentation/ Aging	Aromas or flavors are too ripe and not in favor of desired style	EnartisTan Total Fruity provides structure, improving mid palate, as well as red fruit aromas which will mask raisin characters in the wine.	3-10 g/hL

The above is achieved to the best of our knowledge and experience.

The industrial application of the advice provided does not imply any responsibility on the part of our company.



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Additional tips:

- If fruit is observably raisined or overripe allow for a period of enzyme contact with soaking to improve predictions for potential alcohol. Depending on how the fruit is processed, the raisins may release more sugar over the course of the fermentation. Be sure to check residual sugar and potential alcohol directly after pressing as this process tends to release more sugar.
- Fruit which is overripe may also have higher pH, see our <u>high pH red winemaking newsletter</u> (link to newsletter) or <u>webinar</u> for more considerations for red wines with high pH.

For more information contact the **Enartis USA** technical team at (707) 838-6312.