Inspiring innovation.

PROTOCOL

CIDER

Aromatic Cider

VARIETY	TYPE OF WINE
Heirloom or Modern Apple	Aromatic Cider Production
PROBLEM(S)	**OBJECTIVE**
Fermentation Off Aromas Hydrogen Sulfide	Cider fermentations can be controlled to promote aromatic and vibrant ciders through minimizing oxidation, selecting aroma producing yeast, providing sufficient nutrition throughout and managing microbial contamination with Stab Micro M. To limit production of off-aromas, it is important to stagger nutrient additions both at inoculation and again at 1/3 fermentation, which has been shown to decrease hydrogen sulfide production. Analysis throughout production stages help build consistency

WINEMAKING STAGE	OBJECTIVE	ENARTIS RECOMMENDATIONS	DOSAGE
Juice Transfer to Fermenter	Microbial Protection	**Enartis Stab Micro M**: Pre-activated chitosan, purified yeast hulls. Reduce spoilage microbes like *Brettanomyces*, *Acetobacter*, *Lactobacillus* and *Pediococcus*	10 g/hL
	Clarification	**Enartis ZYM RS**: Enzyme for clarification and to aid filtration. Focused pectinase, polygalacturonase, cellulase and hemicellulase side activities	5 mL/hL
	Tannin	**Enartis TAN Blanc:** Gallic tannin for protection from oxidation and to aid clarification and filtration	10 g/hL
Inoculation	Complex Nutrient	**Nutriferm Arom Plus**: Aroma enhancement during primary fermentation. Strengthen yeast to minimize off aromas and enhance aroma production	20 g/hL
	Yeast { Select One }	**Enartis FERM WS**: Clean fermentation across cider styles, increased cultivated apple variety aroma	25 g/hL
		Enartis FERM AMR-1: Intense aromatic expression to enhance apple flavor	25 g/hL
1/3 Sugar Depletion	Fermentation Nutrient	**Nutriferm Advance**: Nutrient providing complete nitrogen balance to reduce H_2S production, provide detoxifying survival factors and ensure complete fermentation	20 g/hL
Post Fermentation	Antioxidant	**Winy**: Pure, high quality potassium metabisulfite. Microbial and oxidation protection	5-9 g/hL will add 30-50 ppm SO_2
		Effergran: Effervescent granulated potassium metabisulfite. Requires zero tank mixing after addition!	7-13 g/hL will add 30-50 ppm SO_2
	Microbial Protection	**Enartis Stab Micro M**: Removes spoilage microbes such as *Brettanomyces*, *Acetobacter*, *Lactobacillus* and *Pediococcus*. Helps boost aromatics and protect until packaging	5-20 g/hL Maximum addition 20 g/hL

Enartis USA
7795 Bell Road
Tel. (707) 838-6312

www.enartis.com