



Inspiring innovation.

## ENARTIS NEWS

### CRAFTING SIGNATURE CIDERS

Over the centuries, cider styles have evolved to appeal to a wide range of customers. Through decades of R&D, Enartis has developed a portfolio of innovative tools to achieve the desired characteristics no matter what the preferred style is.

#### How to Craft Different Styles

There are many elements that determine the final style of a cider. Using different varieties of apples can lead to different flavors and aromas, but it is also possible to create distinct ciders even when using the same apple type. Once the fruit gets to the cidery, how the cidemaker processes the juice and how the cider is aged can have huge impacts on the final product. Yeast produce, not only alcohol and carbon dioxide, but also a range of secondary compounds that influence the aromas, flavors, and mouthfeel of the final product. Yeast strains can produce different compounds depending on their genetic makeup and on the conditions, such as temperature, pH, and metabolites available during fermentation. After fermentation is complete, ageing the cider on oak or adding products such as tannins and polysaccharides can further influence and refine the sensory profile. Use the protocols below to learn how to get the most out of your cider and achieve your stylistic goals.

#### TRADITIONAL: Crisp, Fresh, and Fruity

For a cider with complexity and a good aromatic lift, use a yeast that produces high levels of thiols and intense varietal aromas, such as **EnartisFerm ES 181**. For even more intense aromas, pair the yeast with **NUTRIFERM AROM PLUS**, a nutrient based on autolyzed yeast with an elevated content of free amino acids. Yeast use free amino acids as important precursors to produce compounds that contribute to the overall aromatic complexity and intensity of the cider. To protect and promote fruity aromas, as well as build structure and length on the palate, add **INCANTO NC CHERRY** at the start of fermentation.

#### BOURBON BARREL AGED: Oaky, Rich, and Structured

Ageing cider in bourbon barrels imparts sweet, oaky flavors and adds depth and complexity. To craft the perfect cider for this style, Enartis recommends using **EnartisFerm WS**, which brings out the varietal aromas inherent in the fruit while expressing spicy characters and building structure. Using **INCANTO NC DARK CHOCOLATE**, a blend of tannins and polysaccharide-rich inactivated yeast, during fermentation will increase body and add heavy-toasted oak notes. Using oak early in the process allows for the integration of flavors, with the added benefit of protecting the cider from oxidation. Finally, ageing on **INCANTO TOFFEE** oak chips will accentuate the sweet bourbon barrel notes of vanilla, caramel, and toffee.



Inspiring innovation.

### **CHAMPAGNE STYLE: Luxurious, Bubbly, and Creamy**

Sparkling ciders are great for every occasion, whether it's a celebration or just relaxing at home. Start with **EnartisFerm PERLAGE**, a yeast strain that was specially selected for the production of traditional method sparkling wine. It produces elegant and clean ciders, and releases elevated levels of mannoproteins that improve foaming properties and give a creamy mouthfeel. Feed yeast with **NUTRIFERM ULTRA** at the beginning of fermentation. It's high content of easily assimilable amino acids promotes healthy, clean fermentations and it is micro-granulated to easily and quickly disperse in juice. During maturation or the pre-bottling phase, adding the fully-soluble yeast mannoproteins found in **SURLÈ VELVET** will add roundness to the mouthfeel and enhance the quality of the bubbles. Mannoproteins act as natural surfactants, reducing bubble size and enhancing their stability, which results in a creamier, more luxurious sparkling cider.

### **BITTERSARP: Refreshing, Expressive, and Dry**

Bittersharp apples are characterized by their combination of high tannins and high acidity. Although they are not good for eating, they make wonderful single-varietal ciders that are refreshing and complex with a dry finish. To increase aromatic complexity, use **EnartisTan MAX NATURE** during maturation. A condensed tannin extracted from exotic wood species, it is excellent for removing reductive and herbaceous notes and enhancing fruity and floral notes. To enhance citrus, botanical, and floral notes, also try **EnartisTan UNICO #3**. It is a powerful blend of hydrolyzable and condensed tannins that increase the cider's resistance to oxidation, which prolongs shelf life and keeps aromatics fresh.

### **NO SO<sub>2</sub>: Clean, Stable Cider with No Added Sulfites**

Many cidermakers want to produce a cider with little or no added SO<sub>2</sub> without sacrificing quality or microbial stability. A cider that is low in sulfites is both appealing to many consumers, and is especially beneficial for canned ciders because the aluminum can react with sulfur to form reductive off-aromas. **EnartisStab MICRO M** contains pre-activated chitosan that is effective against spoilage microbes such as *Brettanomyces*, *Acetobacter*, *Lactobacillus*, and *Pediococcus*. It does not interfere with *Saccharomyces cerevisiae* strains, so it can be used during the juice phase with no negative effects to fermentation. Metals, such as iron and copper, catalyze oxidation reactions that cause browning and aroma loss. **CLARIL HM** removes these oxidative metals, keeping the cider fresh. Finally, **HIDEKI** is a blend of tannins selected for their high antimicrobial and antioxidant activities, making it a great alternative to SO<sub>2</sub> that is natural and allergen-free. Add **HIDEKI** pre-bottling to protect the cider and increase its shelf-life.



Inspiring innovation.

### FRUITY: Bright and Fruity

To craft a bright and fruity cider, it is essential to protect aromatics starting at the juice phase. Using **PLANTIS AF-Q**, a blend of pea protein and activated chitosan, during the pre-fermentation phase protects aromas by removing oxidizable polyphenols and pro-oxidant metals, while aiding in clarification. **EnartisTan BLANC** is a gallic tannin with excellent antioxidant properties to prevent oxidation and enhance fruitiness. During the pre-bottling phase, **CITROGUM PLUS**, a blend of Arabic gum and mannoproteins, reduces astringency and enhances the perception of sweetness and volume.

### FLORAL: Boldly Aromatic

For a cider that exhibits floral notes, the selection of the right yeast strain is key. **EnartisFerm Q RHO** is a *Saccharomyces uvarum* strain that produces high amounts of 2-phenylethanol, the compound associated with the scent of roses, to give a beautiful floral bouquet that adds complexity to the aromatic profile. To further enhance and protect the aromatics, use **EnartisPro BLANCO**, a yeast derivative rich in readily-soluble mannoproteins which improves mouthfeel and body, provides antioxidant protection, and increases the production of aroma compounds during fermentation. After fermentation is complete, adding **EnartisTan SLI** will protect the cider from oxidation and preserve quality throughout the maturation and bottling processes.

### CONCLUSION

There is no one correct way to make or enjoy cider. To learn more about the possibilities, contact the team at Enartis.

[Stay in touch with our newsletter](#)

[SUBSCRIBE](#)

[www.enartis.com/en-us/newsletter/](http://www.enartis.com/en-us/newsletter/)