

QUALITY PROTECTS.



The global market for non and low alcoholic alternatives is growing in both size and significance. While lower alcohol content offers a more favorable nutritional profile, it also increases microbiological sensitivity, driving the need for additional protection. The new natural preservative **Nagardo**[®] and the proven **Velcorin**[®] cold fill technology safeguard the microbiological quality of beverages, while supporting resource efficient and flexible production with low investment costs.

X **Velcorin**[®] **X** **Nagardo**[®]

QUALITY WORKS.

LANXESS
Energizing Chemistry

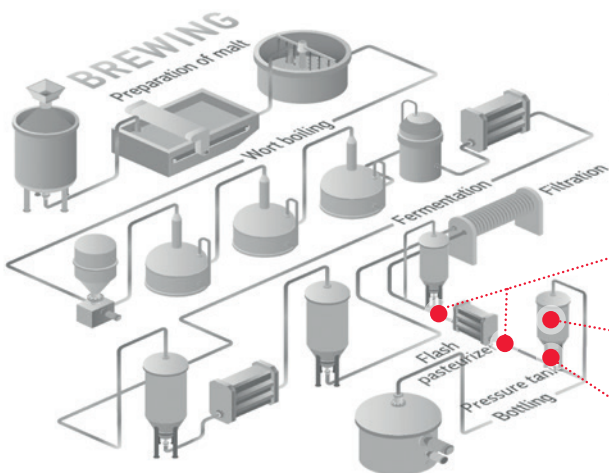
FRESH TASTE PROTECTED BY LANXESS

In recent years, non alcoholic alternatives to traditional beverages like beer, spirits, wine, and sparkling wines have seen a significant surge in popularity. This trend is driven by factors such as growing health consciousness, shifting social norms, and the demand for more inclusive drinking options. The quality and variety of non alcoholic beverages have also improved remarkably. Breweries, distilleries, and wineries are investing in the development of high quality non alcoholic products that replicate the taste and complexity of their alcoholic counterparts. From craft beers to sophisticated mocktails and alcohol free wines, consumers now have a diverse range of choices.

Nagardo® keeps non-alcoholic beer stable and safe in kegs, even after several days on tap. As a result, the beer remains alcohol free and fresh.

Non-alcoholic beer

Non-alcoholic beers have become popular alternatives to conventional beers. Traditionally, these beers were only available in bottles or cans due to the high risk of spoilage in KEGs, primarily caused by the uncertain cleaning status of draft systems. Once connected to the tap, non alcoholic beer can easily ferment due to residual sugars and yeasts, leading to unwanted alcohol formation. However, this is changing with the introduction of Nagardo®.



Inline dosage before or after flash pasteurizer, e.g. via aroma-dosage

Presentation in empty pressure tank, mixing CO₂ injection

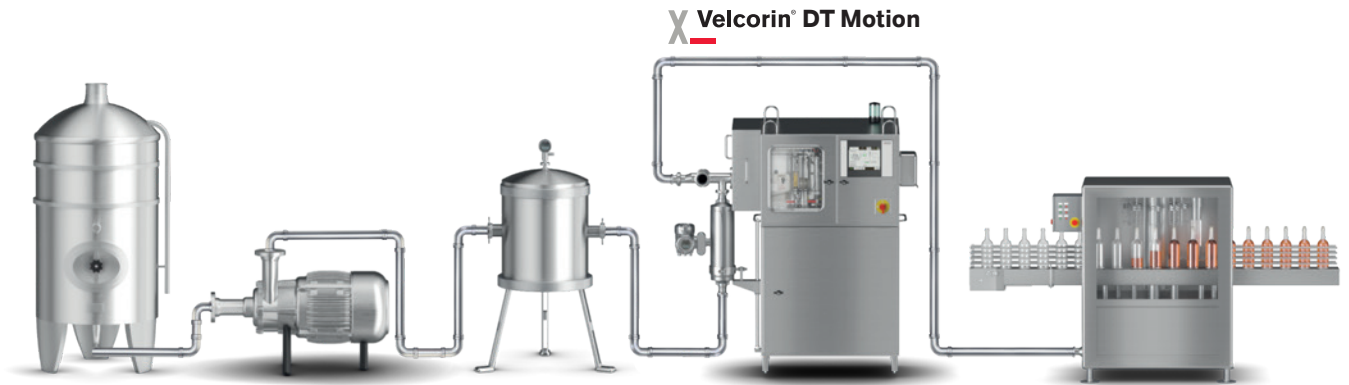
Addition to the filled pressure tank, e.g. via a hop-stopper-system

The Nagardo® stock solution is added after **centrifugation** or **filtration** or **after dealcoholization** to prevent product loss.

- The glycolipids stay in the beer, preventing spoilage or fermentation once connected to a draft system.
- Dosage varies between 10–20 mg/l, depending on the beer type (clear or cloudy).
- The addition of Nagardo® can reduce foam stability, but adjustments in the brewing process, such as incorporating wheat malt or adding hop extracts, can counter this effect.
- Nagardo® can be easily integrated into the brewing process after fermentation, either before or after filtration, and can be uniformly mixed with CO₂ in pressure tanks.
- In biological brewing processes, Nagardo® can be added earlier to prevent contamination by strong fermenting yeasts.

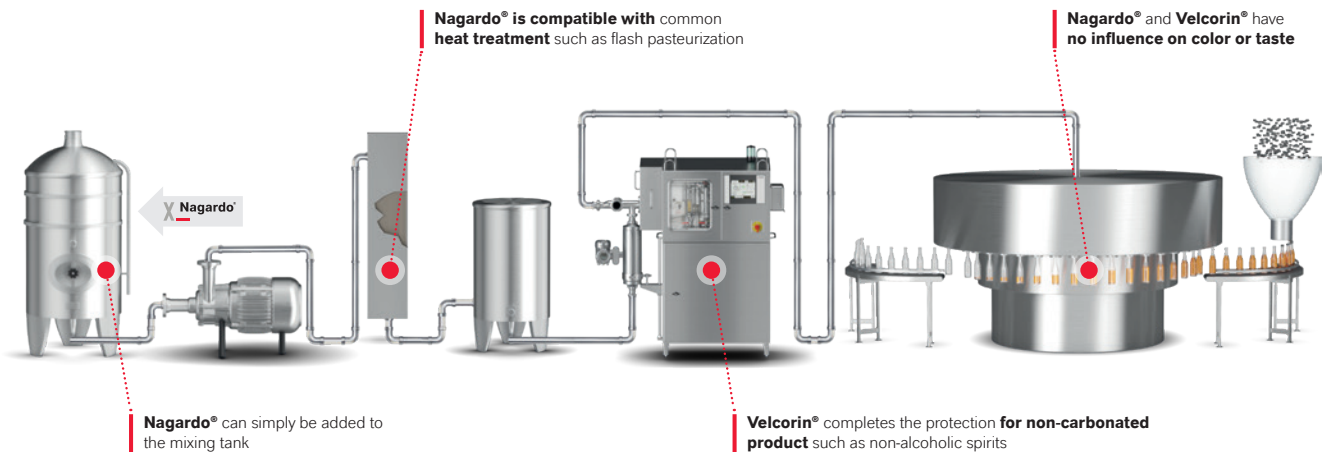
Non-alcoholic wine

Velcorin® technology has long been a vital component of the microbiological safety in non-alcoholic wines and spirits. It effectively targets yeasts, the most critical microorganisms, while preserving the sensory qualities of the beverage. Velcorin® is dosed directly into the beverage stream just before filling, using the innovative Velcorin® DT Motion dosing system. Integration into most existing filling lines is quick and can often be completed within a day.



Non-alcoholic spirits

For non-alcoholic spirits, a combination of Nagardo® and Velcorin® is recommended, as additional protective measures, such as carbonation or sulfur used in other beverages, are absent. Nagardo® is added during mixing, while Velcorin® is dosed just before bottling, ensuring comprehensive protection and quality.





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Note: Information contained in this publication is current as of January 2025. Please contact LANXESS Deutschland GmbH or LANXESS Corporation to determine if this publication has been revised.

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