

Beverage clarifiers and stabilizers

Divergan® F – Keep it clear!



Divergan® is a crosslinked polyvinylpyrrolidone (PVP) that is also known as PVPP. It is produced by popcorn polymerization. Divergan® is insoluble in water, acids and caustic and organic solvents. Divergan® F is our one-way solution for the beverage application including beer and wine.

Why is Divergan® F necessary and important?

Even after filtration, clear beverages contain dissolved phenolic compounds and proteins that form complexes which subsequently lead to turbidity. Divergan® F reduces phenolic compounds without altering the character of your beer or wine. Divergan® F is completely separated from the liquid during filtration. Divergan® is marketed worldwide and supports the clean label approach.

Colloidal stability of beer*

Polyphenol reduction via PCVPP: up to 52 weeks

Protein reduction via, e.g. silica gel: up to 21 weeks

untreated: up to 8 weeks

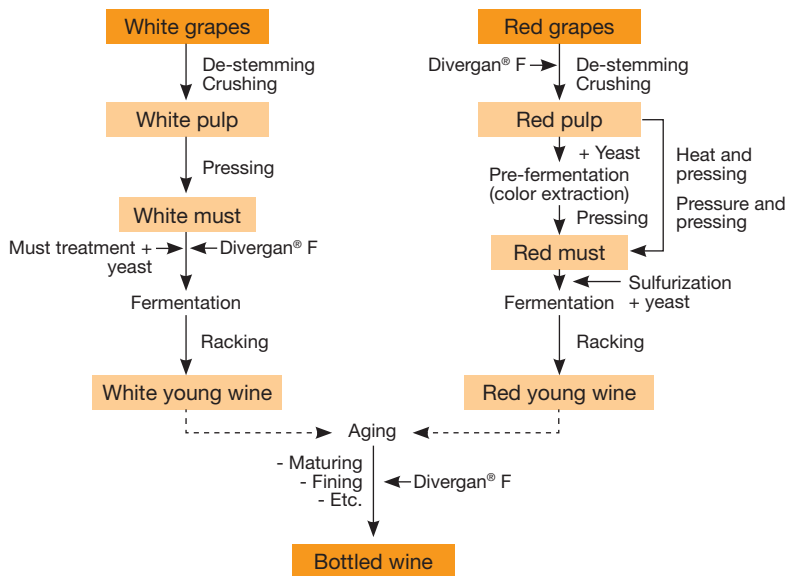
*The colloidal stability factors, such as, e.g. raw material quality, cellar technology, dosage, etc.

every **2nd**
beer worldwide is
PVPP stabilized.

80 percent
of the world's wine
production is produced
by 10 countries.

2 billion
hectoliters of beer
are consumed world-
wide per year.

When to use Divergan® F during the winemaking process



The consumer prefers high-quality wines

Polyphenols are set free through de-stemming, pressing and crushing of fruits. In part of the enological processes more polyphenols are being released into the wine due e.g. to prolonged fermentation of the must. If the polyphenols oxidize during vinification, discoloration and bitterness can occur, diminishing the clarity and sensory character of the wine.

How colloidal turbidities occur

Dissolved phenolic compounds and proteins in clear beer originate from raw materials such as malt and hops. After a relatively short time these compounds form complexes leading to turbidities. Polyphenols have a high haze-forming potential, hence reduction leads to clearer and more stable beer.

How Divergan® F is applied



in beer:

Divergan® F can be added together with the continuous diatomaceous earth dosage in the existing filter line. It is also appropriate for use in storage tanks, where its fine particles lead to slow settlement and enable longer contact times.

For a 100 % malt-based beer, Divergan® F dosage in the range of 20 – 40 g/hL can be recommended. In combination with silica gel it can be reduced to 10 – 30 g/hL to achieve comparable colloidal stability.

Beers with up to a 30 % malt adjunct portion generally require a lower Divergan® F dosage. Good results are often obtained with just 10 – 30 g/hL, or 10 – 20 g/hL in a combined stabilization with e.g. silica gel.

The dosage depends on many factors, e.g. raw material quality, cellar technology, other stabilization measures, desired shelf life, etc.

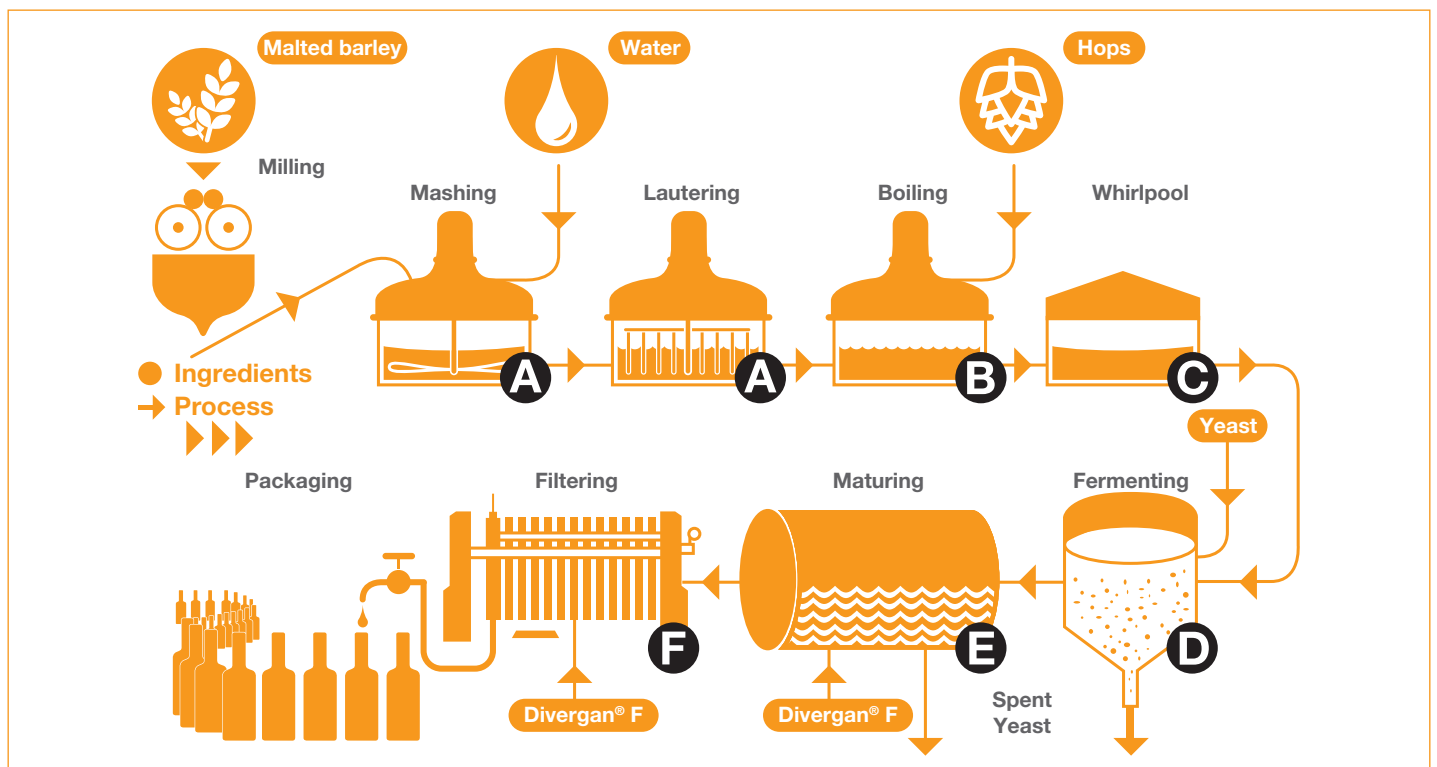


in wine:

Divergan® F can be used in wine on a curative or preventive basis. For preventive measures in white must, use a Divergan® F concentration between 10 – 30 g/hL.

For curative treatment against bitterness and oxidation, use a dosage of 20 – 80 g/hL for white wines and 5 – 20 g/hL for red wines.

When to use Divergan® F during the brewing process



Disclaimer: The statements made herein are primarily for the purpose of providing technical and product information. The information shall be understood as a basic information without any claim to completeness and should therefore be checked in detail for each individual case. The legal framework in a specific jurisdiction must be observed.
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