

Chemical name

Poly-1-(2-oxo-1-pyrrolidinyl)ethylene

EU name

Crosspovidon (PVPP insoluble)

CAS No.

9003-39-8

PVPP E No.

1202

Product number

10060146 kosher

Description

White, hygroscopic powder with a faint characteristic odour. Divergan® F is crosslinked polyvinyl pyrrolidone (PVPP) that has been manufactured by a patented polymerisation process (DP 2437629). It is insoluble in water and all the usual organic solvents.

Standard packaging

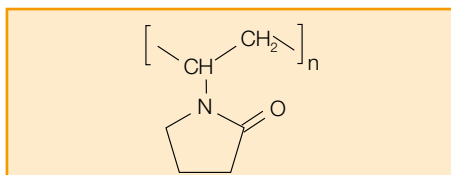
20 and 30 kg.

Please see appendix I for further information.

Storage

Divergan® F should be stored in the tightly sealed package in a dry place.

Stored in the unopened original packaging, it is stable for at least 3 years.



$(C_6H_9NO)_n$ Molar mass cannot be determined as it is insoluble in all common solvents

Function

Divergan® F adsorbs phenolic compounds specifically. This distinctly improves the wine in a number of respects.

The use of Divergan® F brings improvements in the following areas:

- Colour
- Bouquet, taste
- Stability

The colour of the wine can even be stabilised if many of the grapes (or other fruit) are rotten, or if the must has been left to stand for longer than usual.

Divergan® F has also been found useful for stabilising the colour of apple juice and base wines for sparkling wine.

Divergan® F has a special affinity for flavonoid polyphenols. If these substances are not removed from the wine, they can undergo oxidative polymerisation during maturation, causing an undesirable bitter taste. Removing the precursors of tannins and bitter substances is a major factor in preserving the sensory properties of a wine.

Reducing the polyphenol content also decreases the risk of haze caused by protein-tannin compounds.

The risk of brown or black turbidity caused by high concentrations of tannins or iron-tannin complexes is also reduced.

In addition, Divergan® F can be recommended for treating age discoloration.

Application

Divergan® F can be used both preventively and remedially. It is best added as a 10% suspension in a portion of the medium to be treated, i. e. the must or wine, or in water.

The polymer suspension must be allowed to swell for 1–2 hours, preferably with constant stirring, after which it can be added to the fining tank and homogeneously distributed with a stirrer. Within a few minutes (approximately 5–10 minutes), it has almost completed its work.

If, however, the Divergan® F is added dry, it must be thoroughly mixed in and allowed at least 30 min to act.

To save time, the wine or juice can be filtered before the PVPP has completely settled out, though there is no harm in waiting until it has.

1. Preparation

For Divergan® F to develop its full efficacy, it must be suspended in degassed water prior to use. It is ready for use after approximately 1 hour, when it is fully hydrated. The hydration process may be accelerated by adding warm water (about 50°C).

If the suspension shall be metered continuously, it needs to be stirred constantly. For best results, a blanket of CO₂ should be maintained above the suspension to keep the oxygen out.

2.1 Continuous metering

The preferred method of introducing Divergan® F is to add it continuously to the beer stream by means of a metering pump. If no separate metering unit is available, Divergan® F can be added in conjunction with the filtration agent, usually kieselguhr. A contact time of at least 3 minutes should be provided.

For calculating the contact time, please also take into account the filter's sludge capacity.

In some breweries, silica gel is added to the same supply tank in conjunction with PVPP, providing a highly efficient combination of filtration and stabilization effects which save on capital investment, as no additional equipment is required.

2.2 Addition to the storage tank

Divergan® F suspension may also be metered into the storage tank. If added to the full tank, proper mixing must be ensured. If added while the tank is being filled, the turbulent conditions provide adequate mixing.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.
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