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## Technical Information

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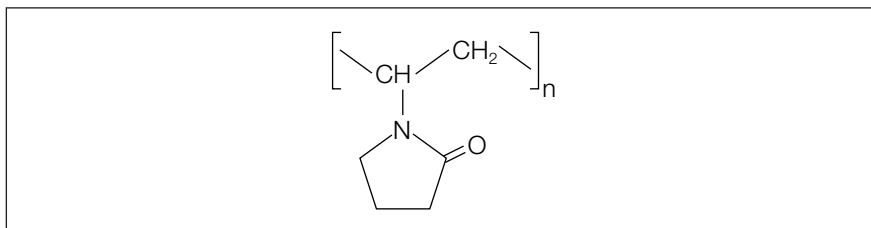
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# Divergan<sup>®</sup> F

**PVPP for treating wine, sparkling wine stock and juices**

**Chemical name**

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

**Structural formula****Molecular formula** $(C_6H_9NO)_n$ **Molar mass**

Cannot be determined as it is insoluble in all common solvents.

**PRD-No.**

30034969

**Description**

White, hygroscopic powder with a faint characteristic odour. Divergan F is cross-linked 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.

**Specification**

See separate document: "Standard Specification" (not for regulatory purposes) available via BASF's WorldAccount: <https://worldaccount.basf.com> (registered access).

**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.

## Quantity

The amount required depends on a number of factors. Preventive use generally requires a lower dosage than that needed for remedial use, i. e. to correct a problem after it has occurred. Because of the multitude of factors involved and the differing requirements of wine producers, we recommend conducting trials on a laboratory scale to determine the optimum quantity for fining.

The best results are obtained if the medium to be treated has already been largely clarified.

Within the EU, the maximum amount of PVPP that can be used in wine fining is restricted by law to 80 g/hl.

|            | Preventive use | Remedial use |
|------------|----------------|--------------|
| Juice*     | As required    | As required  |
| Must       | 10 – 20 g/hl   |              |
| White wine |                | 20 – 80 g/hl |
| Red wine   |                | 10 – 20 g/hl |

*Table 1: Dosage guide for Divergan F. The optimum amount should be determined in laboratory-scale tests. There are white wines that need as little as 10 g/hl for good results.*

\* Treatment of juice with PVPP has not yet been approved in the EU.

## Approvals and safety

Divergan F complies with all the main regulations such as the Food Chemicals Index and the regulations of the European Union.

Within the EU, a dosage of 80 g/hl must not be exceeded in fining wines. The treatment of juices is still not permitted, unless they are for export to countries outside the EU.

The usual precautions against dust should be taken.

Divergan F is not harmful to health if it is properly handled and used for the purpose intended.

Transport and storage present no hazard to humans or the environment.

**Storage**

Divergan F should be kept in closed containers in a dry place to maintain its effectiveness.

It can be stored for 3 years in the original unopened containers without loss of activity.

**Packaging**

Divergan F is available in 20 kg containers. Sample quantities are available in 500 g containers.

**Note**

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