

Fermtech Mini 2 Filtration Machine User Guide

Home » Fermtech » Fermtech Mini 2 Filtration Machine User Guide 🖺

Contents

- 1 Fermtech Mini 2 Filtration Machine
- **2 Product Usage Instructions**
- 3 Filtration Machine Troubleshooting and Guide. Draft
- 4
- 4 Filtering Guide.
- **5 Introduction**
- 6 Hazes- What are they?
- **7 Filtration Basics**
- 8 FAC
- 9 Documents / Resources
 - 9.1 References
- 10 Related Posts



Fermtech Mini 2 Filtration Machine



Product Specifications:

• Product Name: Filtration Machine Mini 2 (Single and Double), Colombo

• Model: Mini 2

• Compatibility: Suitable for home wine and beer brewing

• Usage: Filtration of wines and other liquids

Product Usage Instructions

Introduction:

Bouquet and taste are important, but the appearance of wine plays a crucial role in its appeal. To achieve clarity in your wine, follow these simple rules:

- Newcomers to winemaking can use quickie wine kits with numbered instructions or grape concentrate for better clarity.
- Commercial winemakers use filtration as a finishing process to achieve professional brilliance.

Hazes – What are they:

Hazes are microscopic particles consisting of Pectin, Starch, and Protein found in all living matter. Hazes can be formed from fruits and vegetables used in winemaking, making filtration essential for achieving clarity.

Filtration Basics:

For optimal results, follow these guidelines:

- Prepare a reasonably clear wine by using enzyme and fining treatments before filtration.
- Avoid passing very cloudy wines through the filter to prevent clogging and ensure a smooth flow.
- Treat wines containing Pectin before filtering to achieve brilliant results.

Filtration Machine Troubleshooting and Guide. Draft 1

Troubleshooting your Mini 2 (Single and Double), Colombo and other filtration machines.

- 1. Filter not sucking liquid when pump on. (Just making noise)
 - If you hear the pump running but no liquid is flowing through please follow these priming directions:
 - Check out this video on youtube: (Scan this code into your phone or search on you tube "How to Restore Self-Priming Capabilities of your Super Transfer Pump for Home Wine and Beer Brewing")
 - After connecting all the tubes please pour some liquid into the inlet tube. The more the better. Use the hose and elevation to move the liquid as close to the pump as possible. Put the other end in your liquid container to be filtered. Turn on motor and the pump should start. This is called priming the pump.
 - If the pump is still having problems try blowing air either using your mouth or air compressor into the inlet hose. This should help to move the air out of the pump and start the flow of liquid.
 - If you notice bubbles in your inflow tube pinch the tube with your fingers for few seconds. This should help to eliminate bubbles.
- 2. Filtering results not what I expected:
 - Please check out bellow guide for tips and hints on getting the best filtering results.

Filtering Guide.

This is an effort to inform the Home Wine Maker about potential issues that may arise during the filtration process due to wine-related problems rather than machine-related problems.

It would be difficult and far too lengthy and technical, to go into all the details of how the filtering process works. This is only an attempt to educate you on the process.

Introduction

- Bouquet and taste are important but the appearance of a wine is normally its first attraction. Take a glass of water from the tap, hold it up to the light and observe the brilliance. We take this for granted, if not for drinking! Wines can also shine like this, providing you follow a few simple rules.
- Newcomers to wine-making are more likely to obtain reasonable clarity when they use the "quickie" wine kits, with instructions by numbers, and those made from the wide range of grape concentrate. The old school of winemakers often refer to "making wines like their Grandparents did", but this is not to be recommended. In many cases, they relied upon wild yeast for fermenting, had never heard of tannin, nutrient or enzymes and probably paid little attention to hygiene.
- It is no wonder that the country wines using so many different ingredients, which vary in themselves from year to year, are the areas where the worst clearing problems occur. This is especially so with some of the older recipes.
- Hazes consists of millions of microscopic particles that are too light to settle. A large proportion of these
 normally pass through or clog the finest filtering materials, and this is the reason why filtering on some
 occasions may not be effective.
- Commercial winemakers do not use filtration as a shortcut to avoid fining. They use it as a finishing process to achieve professional brilliance.

Hazes- What are they?

There are basically three main causes:

- Pectin
- Starch
- Protein, which is present in all living matter.

Hazes can, therefore, be formed from all fruit and vegetables used in winemaking. Haze particles are very small, some are jelly-like and are only slightly heavier than water. This means that they will be very slow to settle. Another unfortunate tendency with haze particles is their ability to attract a glue-like layer onto the surface of a filter pad. This soon cuts down the wine flow through the filter to a trickle and the clarity of the wine may not be up to standard. With simple forethought, it is easy to obtain brilliant wines almost every time. The filter pad inside a wine filter cannot work miracles! Passing a thick wine through any kind of filter will not produce a good result. It will clog the filter and even stop the flow.

Filtration Basics

- When you are filtering, you are removing particulate from the wine (something solid –not liquid) that is tiny (referred to as micron-sized particulate). It is extremely difficult to see a micron with the naked eye.
- During filtration, you are eliminating solid particles from the wine that are very small (referred to as micron-sized particles). Microns are so tiny that they cannot be seen with the eye. These particles get trapped in the filter medium (Pads), and as more particles accumulate, the porosity of the filter pad decreases. If you are filtering a dense product or a wine with more particles than the filter can handle, the machine may experience stress sooner than expected. It may slow down, or due to pressure in the filter pad area, the unit might drip excessively or even spray wine from the pads (Colombo Filters Only). This often happens if the wine is very young and has not had time to settle the large particles created during fermentation, or if a product/additive in the wine has clogged the pads. Essentially, the wine encounters an obstacle! Another reason for this issue could be attempting to filter larger quantities of wine than the filter pads can manage.
- There is a limit to how much you can filter.
- If you encounter these problems while filtering, reevaluate your wine. Due to the variety of wines and products used in wine-making, it is impossible to determine an exact amount of wine that can pass through the pads. This is why different grades of pads are available as well as mesh pre screens.
- Passing a very cloudy wine though a filter may not produce a good result. It could clog filter pad and even stop the filter flow.
- Filter pads perform much better when used for polishing a well prepared and reasonably clear wine. You can obtain this by means of simple enzyme and fining treatment before hand.
- Frequently, after fermentation and racking, the wine still remains cloudy with no sign of clearing. This can be due to hazed caused mainly by the presence of Pectin, ot to a much lesser extent Starch. Any wine filter kit will have difficulty in producing brilliant wine where pectin is present. Therefore it is important to treat all wine before clearing.
- Filtration is the last step in wine making, just as you take precautions while you are fermenting and preparing
 your wine, filtration also required some basis of understanding.
 A young wine (30 days old) is not ready for FINE filtration.
- As per our instructions and wine making directions this is the racking and maturing stage for the wine.
- 1. If you are using gelatin and or bentonite in your wine and if these products have not settled sufficiently, this will cause a coating effect on your pads. You may experience back pressure which may cause excessive leakage

and or slower out put.

- 2. Wine should be 2-3 months old and kept in as cool a spot as you have in you home prior to filtration. During this time the wine will mature, achieve better body and allow the suspended particles and products to drop. At this stage you may proceed to filter with the #2 pads to achieve the shine and sparkle in your wine. You then may follow up with our #3 pads. For better results allow 2-4 days between filtration.
- 3. If you wish to filter a young wine (30 days old) we recommend using #1 pads first. You may filter with the #2 pads immediately after filtering with the #1 however the wine is in an agitated state and it would be advisable to wait 2-4 days between filtration. You may then follow with the #3 after 2-4 days.
- 4. A young wine that is being filtered may come through the unit agitated, due to a high content of C02 that may be present in the wine during fermentation, this is normal. Continue filtering into your clean container. Within 10 15 minutes your wine will stabilize and you will see the clarity achieved in filtering.
- 5. We do not recommend bottling your wine directly from the filter, you should filter from carboy to carboy. Your wine is being pumped through the filters and is in an agitated state and should not be bottled as such. Allow your wine to rest for a few days before you bottle. The wine will experience Filter Shock as well as Bottle shock. Give you few days rest after both to recuperate.

We see negative comments on our Listings regarding oxygenation of wine while pumping, or filtering or even just by looking and admiring your wine. Please check out video on bottle shock if you have any concerns. Youtube search "Bottle Shock in Wine! The cause and easy remedy explained"

If you are still having problems please contact us at: support@fermtech.ca.

FAQ

Q: Why is my filter not sucking liquid when the pump is on?

A: The issue may be due to self-priming capabilities. Ensure the pump is properly primed before use. Refer to the user manual for priming instructions.

Q: How can I improve the clarity of my wine using the filtration machine?

A: To improve clarity, ensure your wine is well-prepared and reasonably clear before filtration. Treat wines containing hazes such as Pectin with appropriate methods before filtering for best results.

Documents / Resources



Fermtech Mini 2 Filtration Machine [pdf] User Guide Mini 2, Colombo, Mini 2 Filtration Machine, Filtration Machine, Machine

References

User Manual