



# Troubleshooting Guide

## FERMENTATION

### **My wash failed to start fermenting?**

Your fermenter may not be sealing. Remove the lid of the fermenter to check to see if there are any bubbles rising through the liquid or any froth on the surface or around the sides which would indicate the fermenter not sealing. Alternately, temperature may be too low or high. Fermentation should start as low as 15°C. If the wash is below this add heat using a Brewcraft Heater Pad. If you added the yeast to the wash when it was too hot you may have killed the yeast. In this situation you should not add more Turbo Yeast as this will result in too much nutrient. Obtain an EC1118 Wine Yeast and add this to the wash when the temperature is 20°C.

### **My wash started to ferment but stopped and my hydrometer reading is not down to 990 SG?**

It's probable the temperature rose too high in the first 24 hours of fermentation. It's important to note that that yeast activity can raise the wash temperature by as much as 8°C in the first 24 hours of fermentation. It's essential to start the wash at around 20°C and not use any heat in the first 24 hours. If the wash overheats during this period the yeast may not have the energy to finish fermenting. If this has occurred, first stir the wash vigorously to stir the yeast back into circulation. If the SG has not lowered within 24 hours then obtain an EC1118 Wine Yeast. As there is alcohol present you should first start the yeast working in 200mls of water. Once the yeast has dissolved, add a teaspoon of dextrose. When this is fermenting, add 200mls of wash. When this is fermenting add half of this back to the stuck wash and top back up with wash. Continue this until the wash starts fermenting. Alternately, it may be because the wash has cooled down below 15°C. In this case, warm the wash up and stir vigorously to get the yeast back into circulation. Once the wash is warm fermentation should continue normally.

### **I have tried to get the wash going again but nothing seems to start it?**

Distill it anyway. You will not get as much alcohol as you would from a normally fermented wash. Watch the temperature on the condenser and stop when you have reached the appropriate maximum temperature for your model.

## DISTILLATION

### **I did not get as much alcohol as the instructions said I would?**

Check that you have used the right quantity and type of sugar. Check there are no steam leaks from your still. Another cause could be that your wash has not fermented out.

### **My alcohol is not as strong as the instructions said it would be?**

Check as above. Also, make sure you do not exceed the maximum temperature allowed at the top of the Condenser. If the alcohol is not in the wash then you can't distill it.

### **My distillate is blue?**

Ensure you have used Still Spirits Turbo System products (some brands produce a blue spirit due to an imbalance of nutrients). Use only one Turbo Yeast sachet per 25 Litre wash—if the fermentation sticks do not another Turbo sachet as this will result in an imbalance of nutrients.

### **My distillate is cloudy when it comes out of the still?**

The wash has frothed and come out the condenser. Use Turbo Clear prior to distilling and/or Distilling Conditioner.

### **My distillate is clear when it comes out of the still and has been filtered but it goes cloudy after a few days?**

Mineral Salts have been washed out of the carbon and have reformed in the distillate. These are harmless but unsightly. This problem can also appear as coloured sediment when flavour essence has been added as the salts pick up the colouring from the flavouring. Replace your EZ Filter Carbon Cartridge. Ensure the temperature is kept as close as possible to 20°C during fermentation. Filter spirit containing sediment with a wine filter. Leave until sediment has all dropped out (cold temperatures will accelerate process) and decant off sediment. If fermentation temperature is too high it causes the production of unwanted but harmless proteins.

### **My distillate comes out of the condenser discoloured or has dark flecks in it?**

If the condenser is used for the first time then this could be residue from the manufacturing process. Soak with White Vinegar or flat CocaCola to clean this away then rinse with a weak solution of dishwashing liquid and warm water. If this has not occurred the first time the condenser has been used but occurs on subsequent uses then it can be traced to collecting too much distillate. This will result the problem showing up next time the condenser is used. Clean as above and only collect the correct amount of distillate. Before distilling ensure that the SG is down to 990 otherwise make sure that you do not distill above the temperature limits of your condenser.

### **The condenser seems to overheat even though I am running plenty of water through it?**

The condenser may not be plumbed correctly. Fill the condenser with warm water then pull the hoses off the base of the main condenser. One of these will be the inlet for the water and the other will be the hose that transfers the water into the reflux condenser. The water should flow out of the condenser through the pipe that the inlet water pipe is connected to. If it flows out of the other one then the hoses have been fitted the wrong way around. Alternately, the internal overflow outlet could be missing or loose. Take the marble out of the reflux condenser and shake the whole condenser. There should not be any rattling. If there is, the overflow pipe may be loose.

### **The spirit from my reflux condenser is not as strong as it should be?**

The marble is not in the Reflux Condenser. There should be a marble in the Reflux Condenser, on four indentations in the inside of the Reflux chamber. The marble ensures that all the alcohol laden steam comes in contact with the inside of the Reflux chamber. It can happen that the marble is too small and drops right through the Reflux chamber and comes to rest over the nut at the bottom of the condenser where it screws onto the dome lid of the still. This cuts off the flow of steam into the condenser altogether stopping it from working. If the marble is missing then the Reflux condenser works more like a Pot Still Condenser.

### **No spirit comes out of my condenser and the lid pushes off?**

There is a blockage in the condenser – When the condenser is removed from the still it should be easy to blow in through the spirit outlet tube. Any resistance here would indicate a blockage that will most likely be at the back of the nipple that the outlet tube is attached to. Using a 4mm flat punch and a hammer just tap the punch up the outlet to push the inside wall of the main condenser away from the back end of the nipple. This should clear any blockage.

### **How do I know how much water flow the condenser needs to run correctly?**

Water flow is extremely important for the correct operation of the condenser. First the water runs through the main condenser, then into the reflux condenser. The water warms up in the main condenser as it removes heat from the condensing spirit. This hot water is then fed into the reflux condenser. If the flow of water is too high then the reflux condenser becomes too efficient which reduces the flow of steam into the main condenser. The reduced flow will also result in a higher alcohol content as more of the heavier molecules like water are returned to the Still and what does get past the reflux condenser is the lighter molecules or the alcohol – When a condenser is running properly the top two bands of the main condenser should be very hot. The bottom band of the spiral should be cool and the one above it should be hot but not too hot to touch.

### **Can I fit my condenser from my 5 Litre Still onto a larger boiler?**

Yes you can fit the condenser from a 5 Litre Still onto a “3 in 1” fermenter. This will make a 25 Litre Still. *Please note that in Australia, it is illegal to own and operate a still over 5 Litres.*

### **Classic Finest Reserve Scotch Whiskey goes cloudy when I mix it?**

**This essence is prone to going cloudy if the alcohol content is below 40% or the spirits is very cold** - Make sure the alcohol content is above 40% when mixing. If possible mix it in at 50% then slowly water the spirit down. Make sure the spirit is warmer than 25°C.