

# STILL SPIRITS

## STAINLESS STEEL TURBO AIR STILL

For the distillation of water,  
essential oils or alcohol for making  
spirits and liqueurs





# STAINLESS STEEL TURBO AIR STILL

**For Water Distillation, Bio Fuel Manufacture, Essential Oil Extraction or Alcohol Distillation for making Spirits and Liqueurs**

## THE STILL SPIRITS AIR STILL SYSTEM

### THE WASH

Firstly the sugar and water is turned into alcohol by fermenting with yeast. This is known as "the wash".

### DISTILLATION

Separate the purified alcohol from the wash by distilling, this leaves behind most of the water and other impurities. Distillation is done by heating the wash, boiling off the alcohol and condensing the vapour back into a liquid. The alcohol that comes off does contain some water and is typically 60% ABV.

### CARBON FILTRATION & BOTTLING

Use specially formed activated carbon cartridges to filter out most of the remaining trace impurities.

### FLAVOURING

Finally, adjust the finished strength of your alcohol by adding some water, then simply add your favourite spirit or liqueur flavour



## WATER DISTILLATION

Before use, clean the inside of the still and fill it with clean water to the 4 litre (1 US gallon) line which is marked on the inside. Make sure that no water is spilt on the outside of the body and ensure that both electrical sockets are clean and dry.

1. Fit the top cover of the still in place and plug the fan lead into the socket in the still body.
2. Place a 4 litre (1 US gallon) collection jug (not supplied) under the outlet nozzle.
3. Press the reset button on the base of the still.
4. Connect the main power cord between the still and the mains power socket.
5. Turn on the mains power socket switch.
6. You will hear the fan in the top cover of the still start.
7. It will take about 1½ hours for the water to heat up.
8. Once distillation starts, water will begin to drip into the collection bottle.
9. The still will take about 10 hours to distil off the 4 litres (1 US gallon).
10. The power supply reset switches off automatically when the distillation is completed.
11. You will need to press the reset button on the base of the still before you next use it. After distillation the water needs to be polished. We recommend filtering the distilled water through a Still Spirits Air Still Carbon Filter.

### **Instructions for using Still Spirits Air Still Carbon Filter:**

Fit the carbon cartridge to the filter taking care to ensure the foam washers are fitted between the filter and both ends of the cartridge. Place the filter on the top of a clean 4 litre (1 US Gallon) bottle. Pour water into the filter and top up as necessary.

# ALCOHOL DISTILLATION

You can use the still to produce your own alcoholic sprits and liqueurs at a fraction of the retail price. This can become a fascinating hobby and you will be able to amaze your family and friends with the quality of the drinks you have produced.

The “ART” of distilling has been known for many centuries but has been surrounded by much secrecy and mythology. With scientific advances in understanding the process, we are now able to understand exactly what happens and Still Spirits have been able to reduce this to four simple steps for producing your own drinks.

## MAKING THE WASH (Instructions for use—to produce 2 litres (½ US Gallon))

We recommend that you use an Air Still Fermenter and an Air Still Production Pack, which contains Still Spirits Triple Distilled Turbo Yeast, Still Spirits Turbo Carbon and Still Spirits Turbo Clear for 9 litres (2½ US Gallons). Before you start make sure the tap is securely fitted to the bucket and fill with 7.5 litres (2 US Gallons) warm water to ensure that the unit is water tight. Once you have confirmed that the unit is water tight, sprinkle in the sachet of No Rinse Steriliser. Carefully swirl this around so that it contacts all the internal surface. Discard water.

1. In the Fermenter prepare 7.5 litres (2 US Gallons) of water at 30°C
2. Add 2.2 kg (4 lbs 13 oz) Turbo Sugar (or 2.4 kg (5lb 8oz) Dextrose AKA. Corn Sugar) and stir until dissolved.
3. First massage the sachet containing the Turbo Carbon and then add it to the Fermenter and stir.
4. Sprinkle the yeast from the yeast sachet on top of the sugar/water/carbon solution (wash).
5. Fit the Carbon Cartridge to the Air Filter in the Fermenter lid and then fit the lid to the Fermenter.
6. Let this sit in a place where the air temperature is between 18 and 24°C (64 -75°F) for 7 days.
7. When fermentation is completed the wash will stop bubbling. To confirm fermentation is complete the wash can be tested with a Beer, Wine and Spirit (Wash) Hydrometer. The wash has completed fermenting when the Specific Gravity (S.G.) is below 990 on your hydrometer.
8. Once the wash has finished fermenting it is important to de-gas the wash. This is done by stirring briskly until all fizzing stops. This will likely take a few minutes. Start slowly to avoid a sudden release of the gas. Once all the gas has been removed, add in sachet A and stir well.
9. One hour later, carefully sprinkle Sachet B on the surface of the wash and evenly distribute. Do not stir vigorously at this stage.
10. Leave to stand for 24 hours. During this time the wash should become clear ready for distilling.

## IMPORTANT TIPS

- If you already own a 30 litre (8 US Gallon) Fermenter we recommend you use Still Spirits Triple Distilled Turbo Yeast, as it will give you the best quality wash for your distillation. The Triple Distilled Yeast has been formulated to produce a very clean alcohol and eliminates the need to collect the “heads” (first portion) at the start of the distillation.
- If you choose to use an alternate yeast variety you will have to carry out trials to determine what quantity of heads must be removed at the start of the distillation.
- It is essential that the wash is fully fermented and has been cleared, using finings, before distilling. We recommend you use Still Spirits Turbo Clear Finings.
- It is better to allow an extra day or so to be sure that the wash is fully fermented before distilling.

## DISTILLING THE WASH

**Read the safety instructions for your still BEFORE you use it. These are set out on page 4.**

Once your wash is ready, clean the inside of the still and fill it to the 4 litre (1 US Gallon) line marked on the inside.

1. Make sure that no wash is spilt on the outside of the body.
2. Add the Ceramic Boil Enhancers and one capful of Distillers Conditioner to the still. These are used to reduce the risk of surge boiling, which can happen occasionally.
3. Make sure that both electrical sockets are clean and dry.
4. Fit the top cover of the still in place and plug the fan lead into the socket in the still body.
5. Place a collector under the outlet nozzle. This should have a useable capacity of at least 800 ml (27 fl oz US).
6. Connect the main power cord between the still and the mains power socket and turn on the mains power socket switch. You will hear the fan in the top cover of the still start immediately.
7. The wash will take just over an hour to heat up. Once distillation begins you will see the alcohol starting to drip into the collector.
8. Allow the still to run until you have collected 700ml (23 fl oz US) of alcohol. This will be at a strength of 60% ABV and you can use this to make up a 1 litre bottle at 38 - 40 % alcohol. This should take just over a further hour (that's two hours from start to finish). After you have collected 700ml (23 fl oz US) turn off the still. If you wish to produce 1125ml (38 fl oz US) collect 800ml (27 fl oz US) but the quality will be slightly reduced. Do not try to collect more alcohol than this, as the quality will drop away quickly.
9. Allow the still to cool before removing the top cover. Empty out the remaining wash and clean the inside with clean warm water. Dry the still thoroughly and put away for next time.

## **FILTERING THE WASH**

We recommend that the collected alcohol be passed through a Still Spirits Air Still Carbon Filter to improve the purity before you add your selected flavour and make up to the final volume of 1 litre (1 US Quart) with clean water.

### Still Spirits Air Still Carbon Filter

1. Fit the carbon cartridge to the filter taking care to ensure the foam washers are fitted between the filter and both ends of the cartridge.
2. Place the filter on the top of a clean 1litre spirit bottle.
3. Dilute the distilled spirit to 40% by adding 300ml (10 fl oz US) of clean water. This is necessary for the filter to operate properly.
4. Fill the filter with the distilled spirit and allow to drip into the bottle. Once all the spirit has dripped through the filter top up the bottle with clean drinking water. Leave room to add the flavour.
5. The spirit is now ready to be flavoured with Still Spirits flavour essences to make your favourite spirits and liqueurs.

## **IMPORTANT TIPS**

- Change the carbon cartridge for each bottle filtered.
- If you chose to produce 1125ml (38 fl oz US) of spirit from each run through the still then you will have collected 800mls (27 fl oz US). Add 150ml (5 fl oz US) to this and make up to 1125ml (38 fl oz US) leaving room for the flavour. Remember to change the carbon cartridge after each bottle.
- If you use another type of filter then follow the instructions supplied with your filter.

## **Safety Instructions**

- Always use the still on a flat dry surface in a well ventilated area.
- Always unplug the power cord when filling or cleaning the still.
- Always use only the wall socket switch for turning power on and off.
- Never immerse the still in water, or allow the body base or the top cover to become wet inside.
- This unit is not intended for use by children.
- Do not operate this unit where it is possible for children to reach it.
- Do not remove the top cover when the still is operating.
- Allow at least 20 minutes for cooling, after switching the power off, before you remove the lid.
- The still is fitted with a high temperature cut-out. This is used as an automatic cut-out for water distilling and must be reset before the still can be used again. Use the reset button on the base of the still.
- It is not applicable for alcohol distilling as you are only distilling off about 20% of the starting volume.
- However it will provide a safety back-up if you forget to turn the still off and it is allowed to boil dry. If this happens you will need to press the reset button on the base of the still before it can be operated again.

Please note that in certain countries alcohol distillation is illegal and you will require a licence. Ask for advice or contact your local Customs and Excise Department. We would point out it is illegal to manufacture spirits in the UK without a distiller's licence which is required under the provisions of section 12 of the Alcoholic Liquor Duties Act 1979 and this includes manufacture for "own/domestic use".

Public Notice 39 – "Spirits production in the UK" dated July 2006 provides further information about HM Revenue and Customs's requirements. If you require further assistance then please contact the National Advice Service on Telephone 0845 010 9000 or [www.hmrc.gov.uk](http://www.hmrc.gov.uk). Where you can obtain or view public notice 39.

## **Alcohol for Bio Fuel**

On 30th June 2007 the UK government made it legal for people to produce up to 2500 litres without the need to pay duty or to hold a permit. To make your own bio fuel you will need to double distil the alcohol you make. You should check with car manufacturers as to the level you can add.



Model# MH943T/S

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AS/NZ Approval NSW22926

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To find your nearest Still Spirits stockist visit [www.stillspirits.com](http://www.stillspirits.com)