

Copper Pro[®]

Contents

1. Preface	3
2. Equipment	4
3. Operational commissioning, cleanup and maintenance	5
4. Safety	6
5. Operation	7
6. Getting started	8
7. Distillation process	9
8. Collecting the essential oil	10
9. Our mission	11

PREFACE

Dear customer.

Take our congratulations on your purchase of a unique distilling equipment. Your copper still perfectly combines an elegant appearance and high performance. Ukrainian essential oil distillers are made exclusively of copper which is the best material for distillation, and this has already been tested for many centuries. Construction of the still was carefully thought out and repeatedly improved over time.

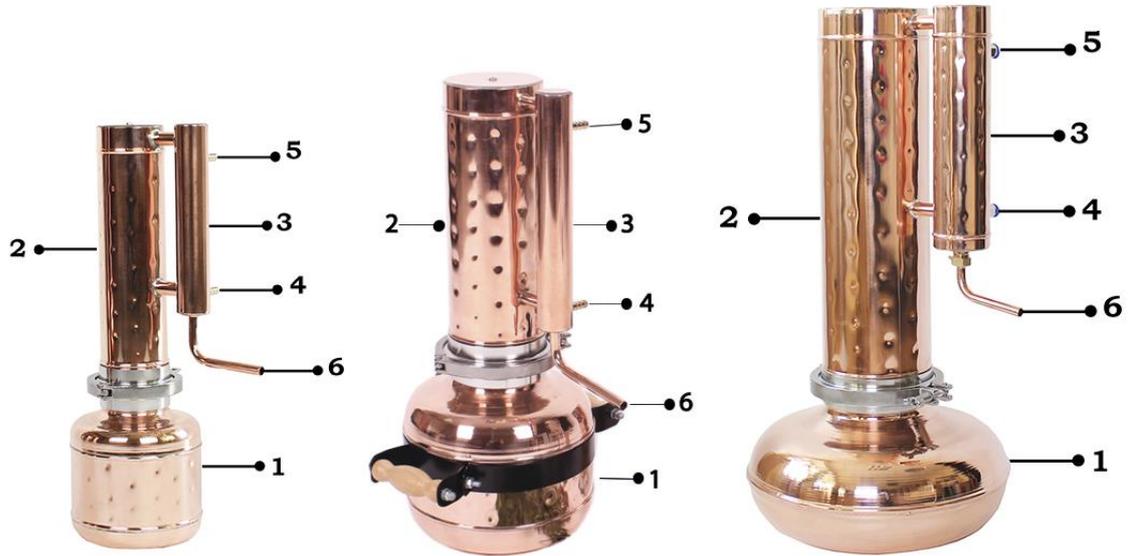
This copper still allows you to produce essential oils and hydrosol of the highest quality and with amazing flavour. Now you are ready to discover the whole world of home-produced hydrosols, and powerful organic essential oils. We do hope you enjoy using and sharing them with your family, friends, and somebody wishing to discover the powerful and joyful use of essential oils. They deliver the fragrant flower substances for both animal and human health. If you have any question related to the still or its service, please contact us. **Important. Carefully read the information in the “Safety” before proceeding to distillation.**

YouTube channel for more information.



EQUIPMENT SET FOR ESSENTIAL OIL EXTRACTION (HYDROSOL DISTILLATION)

Material: copper, brass, stainless steel 304

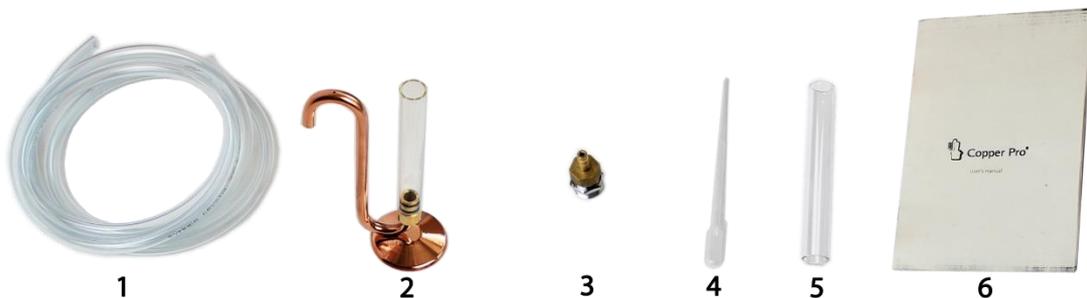


Thickness: 0,8-1 mm

Components:

- | | |
|-------------------|--------------------|
| 1. Boiler | 4. Water inlet |
| 2. Flavour column | 5. Water outlet |
| 3. Condenser | 6. Hydrosol outlet |

Additional items of basic set:



- | | |
|----------------------------|-----------------------------------|
| 1. Water hose | 4. Pipette |
| 2. Essential oil separator | 5. Spare glass tube for separator |
| 3. Adapter for tap | 6. Manual |

OPERATIONAL COMMISSIONING, CLEANUP, AND MAINTENANCE

Are you planning to use your essential oil distiller for the first time? Simply distil a few litres of water using your new still. You can do the same procedure if your distillation still was not in use for a long period.

If you notice that the copper surface becomes much darker you can use citric acid for removing copper oxide from the copper surface. You will need 100 grams of citric acid per 20-litres distillation still. We recommend to use 0.5% citric acid solution for the most thorough cleaning of the surfaces. Dissolve 5 grams of citric acid in 1 litre of water to make 0.5% solution. Fill the distillation still with this solution up to its filler neck and leave it for 4-5 hours.

For example, you will need 100 grams of citric acid per 20-litre distillation still.

The distillation still with more severe contamination should be left overnight. You can use the same solution for cleaning other parts of the flavour still. **Firmly fix** the flavour column in position turned with the open part upwards, and fill it with the citric acid solution.

To accelerate the process of removing copper oxide from the copper surface you should preheat the water before introducing the citric acid solution, and bring it to the boil by increasing the concentration of the solution to 2%.

Despite the green shade you may drain the used citric acid solution into a container, and use it later for re-cleaning. After removal of copper oxide from the copper surface you should always wash the surface with warm water, and if possible, wipe it dry.

SAFETY

Making hydrosols and essential oils is a relatively safe hobby, however, there are some risks as for any endeavor. If you pay attention to a few key safety guidelines, you will not encounter any issues. Observe the following safety precautions in the course of distillation:

1. Make sure that the place for distillation is well lit for prompt detection of possible steam leakage, and has sufficient ventilation to mitigate any consequences of accidental steam release during distillation.
Before starting distillation, make sure that the steam pipe and condenser are not clogged. To check it, you can just blow into the hydrosol outlet (No. 6 on the picture above). If it is clogged it may cause dangerous excessive pressure in the distillation chamber.
2. Reloading the flavour column during the distillation process pay attention to the top parts of the still, such as a boiler, clamp, column and the upper part of the condenser. Beware! Once you remove the column the hot steam is released from the pot.
3. Loading the column with the raw material be aware that hard grasses such as rosemary, and lemongrass take more space after distillation. So, don't forget to leave some free space in the column to open the sieve after the finish of distillation.
4. If hydrosol stops dropping from the hydrosol outlet it means that there is no more water in the boiler or the condenser is blocked. **Attention, switch off the cooker immediately; add the water flow to cool down the system quickly.** Check if there is enough water in the boiler and if condenser is blocked.
5. It is recommended to make regular cleaning of the distillation still as described above.
6. It's important to ensure a constant and sufficient supply of water to the condenser. Prevent the temperatures of distillate coming out of the condenser from rising above 35 °C. You can intensify cooling by increasing the water flow into the condenser.

OPERATION

General description of distillation process.

The boiler of your distiller serves as a steam generator for steam distillation. The flavour column is meant to keep inserted raw material above the water so that steam distillation can be performed. If your intention is to extract the essential oil, we advise to fill the boiler with water up to 40% of its volume. If you would like to have hydrosol for further use, you can fill the boiler up to 80% of its volume.

When water steam rises up, it takes particles of essential oil from the raw plant material. Subsequently, the steam goes through the steam pipe to the condenser. Cool water comes into the condenser (condenser) from the bottom part, and cools down the tubes installed inside the condenser.

The steam passes inside the same tubes, and consequently gives its temperature to the water. Hot water flows out from the upper part of the condenser and cooled hydrosol drops from the hydrosol outlet.

Essential oil can be extracted in different ways. There are two possibilities for home extraction: steam extraction and water extraction. The former is carried out when raw material is put above water level. It is considered as a more efficient way for oil extraction. Water extraction is performed when raw material is added to the water in the boiler. So, if you want to get a lot of essential oil you need a flavour column as big as possible.

GETTING STARTED

- Pour water into the boiler.
- Fill the column with raw material. Leave enough space if hard raw material like rosemary are used. It can increase its volume by 20% of initial size. If loose herbs and petals are used for extraction (like Sage, Melisa, Rose) you can press it a little bit to put more material.
- Close the column with the sieve.
- Put the silicone gasket into the rim of the boiler, and attach the column with the clamp.
- Connect the still with your water system.



- You can use the adapter provided with your distiller set . For this purpose you have to remove the aerator from your home tap and screw it into the adapter.

- Put a hose on the adapter and the other end of the hose on the tube 4 (see image on page 4)
- Put other hose on the tube 5 in the upper part of the condenser. Other end of the hose put into the sink. Hot water will be coming there.
- Alternatively, you can use a water pump for cooling.
- Connect the adapter for the water pump with the pump and the hose provided. Connect other end of the same hose with the tube 4 (see image on page 4).
- Fill a bucket with cold water (at least 12 L of water) and put it on the table near the cooker.
- Put other hose on the tube 5 in the upper part of the condenser. Put other end of the hose into the bucket. Fix the hose in such a way so that it will not be able to get out of the bucket during distillation process.

- Assemble Oil separator.



Put a glass tube onto a metal part with two rubber rings to assemble the separator. **Before inserting, grease rubber rings with any oil.** Then gently insert the glass tube making circular movements.

- Put the oil separator with the funnel below the hydrosol outlet. Put a vessel below the copper tube of the separator to collect the hydrosol.
- Switch on the cooker and wait for the first drops of the best hydrosol and essential oil of home quality.

DISTILLATION PROCESS

1. Set the maximum heating temperature for the whole distillation.
2. If you extract the essential oil:
 - for soft raw material like petals, flowers you can stop it after 10-15 minutes of dropping. Up to 90% of essential oil content of your material will be extracted within this time.
 - for hard materials like rosemary, eucalyptus etc., you can prolong distillation process up to 25-30 minutes.
3. If you want to extract more essential oil you can do it by refilling the column with the same raw material. To refill the column you need to do the following:
 - ✓ Switch off the cooker, and carefully remove the clamp holding the lower part of the condenser. Put the column aside, and remove the sieve. Be careful of water hoses, it can hook on something on the table.
 - ✓ Remove the raw material from the column using a stick.

- ✓ Put new raw material into the column and do as described above; close it with a sieve.
- ✓ Put the column back on the boiler and close it with a clamp.
- ✓ Switch on the stove.
- ✓ You can repeat the refilling process many times

Caution. All parts of the still except the lower part of the condenser are very hot. Be careful and use gloves. Beware of the steam when you remove the column.

HYDROSOL DISTILLATION

It is preferable to have raw material in the column for hydrosol distillation. For this purpose fill up the column with plants as it was described on page 8. Fill the boiler with water up to 80% of its volume. You do not need a separator for hydrosol distillation but it is preferable to use a funnel with a cotton disc to filter hydrosol. It is recommended to use approx. 0,5 kg of the raw material for obtaining 1 L of hydrosol. Depending on the quality of the hydrosol you can increase or decrease the quantity of raw material for 1 L of hydrosol obtaining.

COLLECTING THE ESSENTIAL OIL

Small particles often mix with the essential oil during extraction process and make the product impure. To collect pure essential oil you can leave it in the separator for 3-4 hours or even more. All the particles will deposit, and you will be able to collect pure oil using the pipette.

OUR MISSION

We create practical aesthetic equipment which helps our clients to produce their own high quality products. 🇺🇦

Please, contact us if you have any questions related to our equipment or distillation process, and we will provide you with all necessary information and help you.



+38 097 915 2722 (WhatsApp, Viber)
+14243079207



marketing@copper-pro.com



copper-pro.com



Zaliznichne ave, 45, off. 204, Kyiv, Ukraine