

Instructions for Making Hydrosols Using a Copper Alembic Distiller



Making hydrosols is a simple process.

Plant material (peppermint leaves, lavender flowers, pine needles etc.) is placed in the **retort** ("pot") along with water. It's best to have the plant material **free floating** in the water. If packed with too much plant material, you run the risk of burning your plant, resulting in very poor quality hydrosols. Plant material can also be packed into the **onion**.

After filling, the **onion** is placed on top of the **retort**. To seal the joint between the **retort** and the **onion** against steam leaks, the traditional method is best. Make a dough from **rye flour**. Some will make the dough to the consistency of paste, and smear it over the joints. Others will make a dough as if to make bread. The dough is then rolled into a rope. The rope is then pressed over the joints to make the seal. If a steam leak is discovered, it is easily plugged with more dough. You must use **rye flour**, other flour will crack when dried by the heat of distillation.

The **retort** with onion is then placed on a burner. Stove top or electric hot plate. For making **hydrosols**, the water must be boiled. The **Bird's Beak** is then attached to the **condenser** using the pipe fitting attached. The **condenser** is then filled with cooling water. You will note the "**serpentine**" inside the **condenser**. The **serpentine** is a tubular copper coil. Steam produced in the **retort** travels through the **Bird's Beak** and enters the **serpentine** coil. The coil is surrounded by water, which will cool the steam inside the **serpentine**. Once the steam is cooled, it reverts back to its liquid state. The waters flow from the tube at the bottom of the **condenser**. Capture the **hydrosols** in the container of your choice. You may wish to filter the **hydrosols**. For this purpose, a coffee filter and a funnel will do the trick.



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These copper **Alembic** distillers are made in the traditional fashion using riveted unions. In the factory, the unions are covered with a mixture of linseed oil and rye flour. **DO NOT** scrape this mixture off. This will not effect your **hydrosols**. Your **very first distillation** should be with a mixture of **rye flour** and water. Add approximately 1 pound of **rye flour** and water to the retort. Boil the water and distill the mixture for about 20 minutes. Immediately after the distillation, flush the interior of the **retort**, the **Bird's Beak** and the **serpentine** coil with water. Do not allow the water and **rye flour** mixture to dry. If a leak in the riveted unions should occur (this is very rare) the problem is easily remedied with a mixture of **rye flour** and **egg white**. Simply make a paste and plug the leak on the inside of the retort.

In your waters you will find water soluble fragrant compounds that that have been distilled from your plants. You may also find small amounts of essential oil floating on top of your waters. The **hydrosol** can then be used in your laundry water, in the steam iron, and for making your own refreshing fragrant sprays.

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