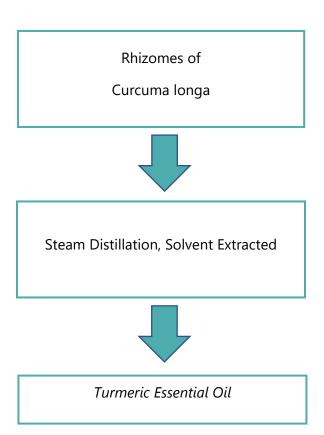


# **Product Flow Chart**

## Turmeric Essential Oil





### **Extraction Process Details:**

#### Steam Distillation

- 1. A large container called a Still, which is usually made of stainless steel, containing the plant material has steam added to it.
- 2. Through an inlet, steam is injected through the plant material containing the desired oils, releasing the plant's aromatic molecules and turning them into vapor.
- 3. The vaporized plant compounds travel to the condensation flask or the Condenser. Here, two separate pipes make it possible for hot water to exit and for cold water to enter the Condenser. This makes the vapor cool back into liquid form.
- 4. The aromatic liquid by-product drops from the Condenser and collects inside a receptacle underneath it, which is called a Separator. Because water and oil do not mix, the essential oil floats on top of the water. From here, it is siphoned off. (Some essential oils are heavier than water, such as clove essential oil, so they are found at the bottom of the Separator.)

### Solvent Extracted

- 1. This method employs food grade solvents like hexane and ethanol to isolate essential oils from plant material. It is best suited for plant materials that yield low amounts of essential oil, that are largely resinous, or that are delicate aromatics unable to withstand the pressure and distress of steam distillation. This method also produces a finer fragrance than any type of distillation method.
  - 2. Through this process, the non-volatile plant material such as waxes and pigments, are also extracted and sometimes removed through other processes.
- 3. Once the plant material has been treated with the solvent, it produces a waxy aromatic compound called a "concrete." When this concrete substance is mixed with alcohol, the oil particles are released. The aforementioned chemicals used in the process then remain in the oil and the oil is used in perfumes by the perfume industry or for aromatherapy purposes.