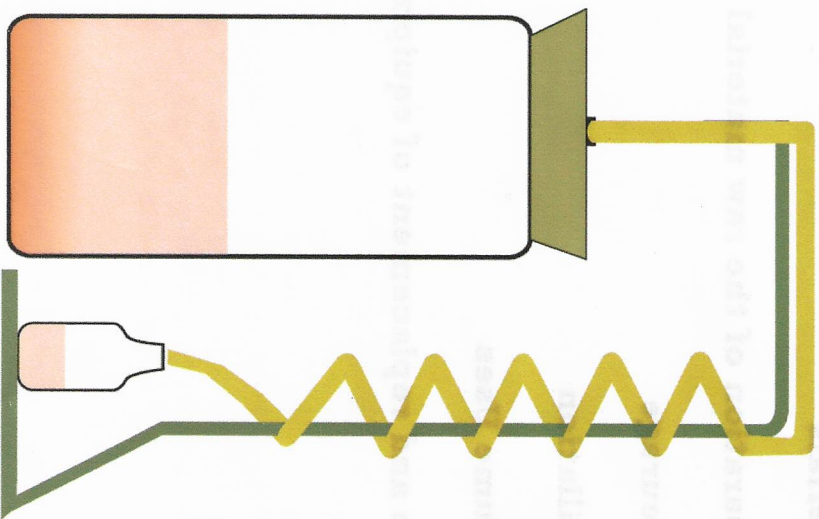


Perfumed soap can be prepared by melting a bar of unscented soap (Ivory), adding 1/4 ounce of cologne per bar, and letting the soap reharden in a mold in a cool place.

### CARE AND REPLACEMENT OF EQUIPMENT

With proper care, your Floralab Perfume Maker can be reused many times. After distillation is complete, the melted lard should be poured out of the enflourage-retort and discarded. It should be wiped with paper towels inside and out and washed.

# Fun With Your Floralab Perfume Maker



\*ADULT SUPERVISION REQUIRED\*

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Heat the water in the pan to a simmer. Place the one-ounce receiving vial under the condenser on the stand. Soon you will notice drops of liquid dripping into the vial. This is the finished perfume. Continue to apply heat to the water until the one-ounce receiving vial is filled. If at any time, steam comes from the condenser rather than drops of liquid, reduce the heat. Similarly, if a strong aroma of perfume is apparent, the essence is being lost and the heat should be reduced.

When the one-ounce receiving vial is full or the dripping from the condenser stops, the alcohol that has been added together with the aromatic oils have been completely distilled and collected. This is the concentrated perfume - the finished product except for a few additional modifications you may wish to make. These embellishments are described in the next section.

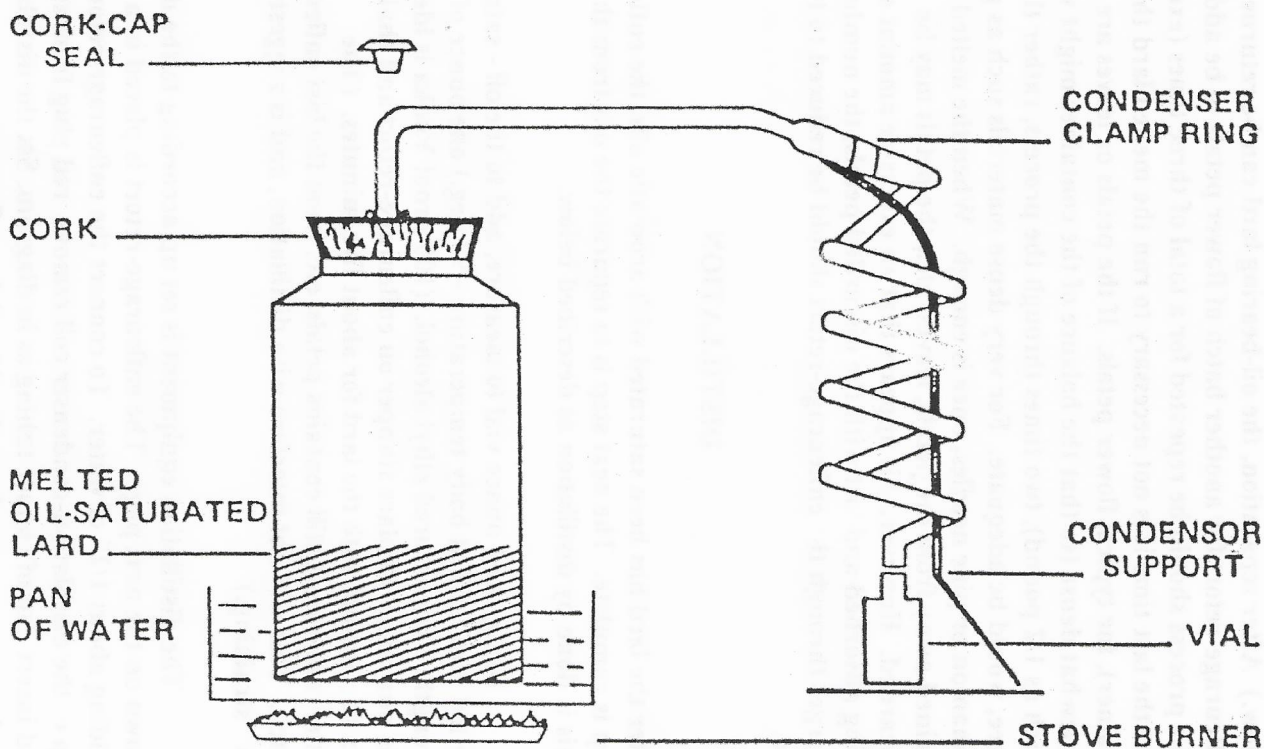
### PERFUME USES

The perfume, as distilled, can be used in its concentrated form. It is necessary only to keep it in a tightly stoppered bottle to prevent evaporation. One perfume also can be blended with others to obtain variations in fragrances.

Eau de Cologne or toilet water can be made by diluting the perfume with additional alcohol (vodka). Highly concentrated perfumes need about 3 parts of alcohol added to make Cologne.

After-shave lotion can be made by dissolving 1 part of vegetable oil in 3 parts of Cologne.

A hand lotion can be made by adding 1 part of cologne to 3 parts of vegetable shortening (Crisco)



## INTRODUCTION

The extraction of perfumes from various natural substances such as flowers, roots, bark, leaves and animal oils pre-dates recorded history. To ancient man, the aromas of spices, Herbs and flowers were very pleasing.

The manufacture of perfumes and fragrances is today a multi-billion dollar industry, vatted along on the eager purchases of legions of men and women of all ages. Manufacturers of such diverse items as laundry powder, printing inks and upholstery have learned the value of adding pleasant smells to their products. You might say that all of this has been done to make our life on this planet more enjoyable.

Prior to about 1850, all essences were derived from natural sources, but with the advent of modern organic chemistry, it was discovered that many natural fragrances could be synthesized in the laboratory. These synthetic aromas, although often inexpensive and producible in enormous quantities, do not usually compare favorably with the natural product. Flower odors generally are not just a single aromatic chemical but rather a complex consisting of numerous chemicals. The laboratory copy almost always can be distinguished from its natural counterpart, and nature usually wins in the judging.

All but the most expensive commercial perfumes are made largely, if not entirely, from synthetics. here are several reasons for this. First is the matter of availability. Enormous tracts of land would be required to grow enough flowers to supply the world's perfume demand. In addition, there would be problems of crop failures and the problem of finding labor for just a few days while the blossoms are in full bloom. In other words, the world's needs for perfumes are too great to be supplied by natural sources.

If synthetics are so inexpensive, why bother to make your own perfume? There are several very good reasons. Making your own perfume saves money and it is a unique, satisfying, and enjoyable experience.



You can save money by making your perfume rather than buying it even after considering the value of your time. The perfume industry is known for its very large price markups. Women (and men, too) often buy a perfume for its "reputation" rather than the fragrance.

Another reason for making your own perfume...if, in your garden, you have a flower whose odor you like especially, it may be difficult or impossible to determine the commercial perfume that resembles it. The outrageous names given to commercial perfumes give no clue whatsoever as to the nature of the fragrance. A sniffing expedition is likely to lead to total confusion, if not nausea. If you make your own perfume, you know the ingredients, you can describe them to others, and you do not have to guess.

As mentioned above, the quality of natural essences usually exceeds that of the synthetics. To make your own perfume may be the only practical way to enjoy this quality. Natural rose oil, for example, if obtainable, is worth \$35.00 per ounce. Other fragrances are about the same. If you have access to the flowers, you can make these scents yourself.

Finally, for most people, there is a great satisfaction that comes from producing something of value through their own efforts. In this age of increased reliance on the world of commerce for our daily needs, it is a source of solace and comfort to be able to break away and prove to ourselves our independent sufficiency.

Finally, perfume making is fun. With this craft and skill, you will amaze your friends and delight yourself. To top it off, you can make your family the loveliest-smelling in the neighborhood.

below.) After separation, the oil-bearing lard can be returned to the enflourage-retort for another batch of flower petals to be added. This process should be repeated for a total of three times (except that the last time it is not necessary to run the melted lard through a strainer), for typical flower petals. If the petals or leaves are somewhat dense (so that the balance of the container might weigh as much as 1/2 pound), two times through the process, rather than three, would be adequate. For very dense materials such as ground cinnamon or pine needles, once is enough. When the melted lard is drained away from the petals, leaves, etc., the petals may be discarded. However, if it appears that an excessive amount of lard is being absorbed and lost with the discarded petals, the number of charges through the enflourage-retort should be reduced to two or one.

## DISTILLATION

After the lard has been saturated with aromatic oils, the enflourage step is complete. The next step is to separate the oils from the lard. This is done by distillation as described below.

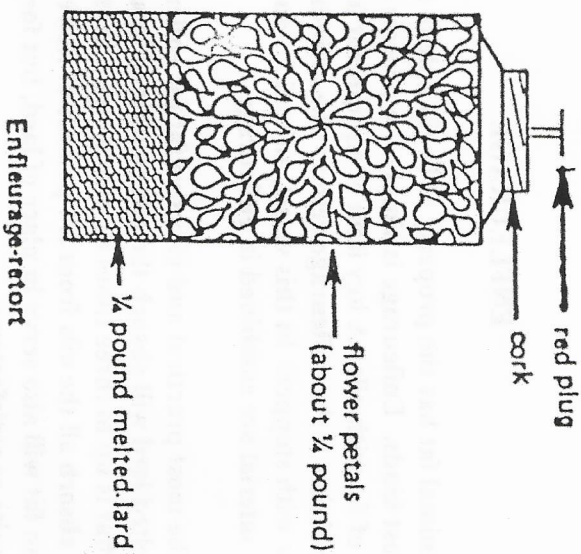
Using the 1 ounce vial to measure, add to the oil - saturated, melted lard (still at body temperature - 98 deg.) one ounce of high-strength, undenatured ethyl alcohol. (100 proof Vodka is ideal for this purpose.) Replace stopper on enflourage-retort and shake to mix the alcohol with the lard for about five minutes. (The enflourage-retort still contains petals, etc. from the last enflourage batch. This will not interfere with distillation, and is suggested to save straining.)

The distillation equipment is set up according to the drawing shown on the next page. The enflourage-retort is placed in a pan holding about 1/2" of water. To connect the enflourage-retort to the top of the distillation-condenser coil remove red plug from stopper and insert end of copper tubing as in diagram. Set the distillation-condenser conveniently to the side of the enflourage-retort standing in the pan of water which is set on a stove burner.



should be just slightly warm to the touch. The 1/4 pound of melted lard will occupy about 1/8 of the volume of the enfleurage-retort.

Fill the balance of the container with your flower petals or whatever other material you are using unless it is a very dense substance such as powdered cinnamon. In that case, add no more than 3/4 pound. Flower petals to fill the balance of the container will weigh about 1/4 pound. When the container has been filled, put the stopper with little red plug inserted in the container and shake vigorously to make sure that the melted lard has come in contact with all the flower petals. Let stand at a warm temperature for about an hour so the oils can transfer to the lard. Shake occasionally.



After the hour is up, the contents of the container should be poured through a strainer to separate the melted lard from the flower petals from which the oils have been taken. (Again, for dense materials like ground cinnamon, special instructions are covered

## STEPS IN THE PERFUME-MAKING PROCESS

Basically there are only five steps in perfume making.

They are:

1. Selection of perfume-making raw material.
2. Preparation of the raw material.
3. Enfleurage - the trapping of the essential oils in animal fat
4. Distillation - the solvent extraction of the essential oils from the animal fat and subsequent condensation.
5. Capturing the essential oils in useable form.

Although for some materials and fragrances there are variations in these steps, the methods described are the most common and will be used with your Floralab Perfume Maker. Each of these steps are described in detail in the sections that follow.

### SELECTION OF THE PERFUME-MAKING RAW MATERIAL

The aroma of almost any plant product - flowers, leaves, fruit, berries, roots, etc. - can be captured with your Floralab Perfume Maker. The choice is based on whatever is available and your personal preference.

Any aroma is caused by "essential oils" present in the material. These chemicals are fairly volatile (that is, they will evaporate into the air in gaseous form) and will not quickly oxidize or disappear. A good perfume-making material will have these essential oils in fair abundance. A flower that has only a faint odor will not make a good raw material.

Below is a list of common flowers, leaves, and other materials that make good perfume-making ingredients.

Flowers

- |             |            |                     |
|-------------|------------|---------------------|
| Roses       | Carnations | Gardenias           |
| Marigolds   | Lilies     | Lilly-of-the-Valley |
| Honeysuckle | Geranium   | Violets             |
| Lilacs      | Jasmine    |                     |

Leaves

- |            |     |              |      |
|------------|-----|--------------|------|
| Eucalyptus | Bay | Pine Needles | Mint |
|------------|-----|--------------|------|

Fruits, Nuts & Berries

- |        |            |         |      |
|--------|------------|---------|------|
| Nutmeg | Bayberries | Juniper | Lime |
|--------|------------|---------|------|

Bark & Roots

- |          |             |       |
|----------|-------------|-------|
| Cinnamon | Honeysuckle | Cedar |
|----------|-------------|-------|

**PREPARATION OF THE RAW MATERIAL**

All aromatic oils are volatile, that is, they will pass rather quickly from a liquid state to a gaseous state and be dispersed in the air. If these oils come from a flower, they are being manufactured constantly by the plant as long as the plant is growing and blooms are developing. As soon as a flower is picked, the process stops, and the flower gradually loses its fragrance. Therefore, if perfume is to be made from flowers, it is very important to have the equipment all ready to go so that there is a minimum delay once the flowers are picked.

Preparing flowers for perfume making is not at all complicated. They are simply picked without stems and leaves. In fact, since only the flower petals contain aromatic oils, the petals are the only part of the flower that's really needed. Flowers should be picked a "batch" at a time. (In the next section, Enfleurage, a batch is defined.) Also, flowers should be fairly dry - not dew or rain-soaked.

If roots, bark, berries, or nuts are to be used for perfume-making, they should be finely-ground or powdered. This is necessary in order to provide maximum surface contact with the animal fat in enfleurage, the next step in the process. Several aids to this powdering or grinding are a cheese grater, pepper mill, making sawdust with a saw, or cutting the material into small pieces with a scissors. These materials, too, should be prepared a batch at a time.

**ENFLEURAGE**

Animal fat has the property of being able to absorb aromatic oils of most kinds. Enfleurage is simply the process of saturating a measure of fat with oils. A key item of equipment in your Floralab Perfume Maker is the enfleurage-retort; the cylindrical glass container with stopper. In this vessel, animal fat and the perfume-making material are combined in enfleurage.

The most practical and effective fat for enfleurage is ordinary lard. Melted lard will absorb the oils contained in an amount of flowers that is up to three times its own weight, that is, 3/4 pound of lard will absorb all the oils from 3/4 pounds of flower petals. Butter and bacon fat will also serve in place of lard, but for various reasons are not quite as satisfactory.

Lard melts at about body temperature (approximately 98 deg. F). In the enfleurage-retort place 1/4 pound of lard (1/2 cup) and warm it until it melts. To avoid overheating, do not place the container directly on a stove, but set in a pan of warm water. If