



Envirocycle™ Composter / Composteamaker™ General Information and FAQ (frequently asked questions).

For the Love of the Earth, compost with the Envirocycle™
Composter/Composteamaker™!

Compost is produced through the recycling of organic materials. Food scraps, leaves and yard trimmings, paper, wood, can be transformed into compost through composting. Like painting, organic composting is more art than rigid science and it can, at times, require a bit of finesse and skill. However, with patience and a little practice, you can have ready-to-use humus for your garden in 4-6 weeks, using the Envirocycle™ Composter/Composteamaker™.

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1. Envirocycle™ Composter/Composteamaker™ Product Description

Product Size : H 30.5" x W 25.5" x D 20.25" (H 72cm x W 62cm x D 51cm)

Weight: 19 lbs (9kg).

Capacity of 1 Cycle of Composting: 7 Cubic Feet (0.2 Cubic Meter) of Compost and 19 Liters of Compostea.

5 to 10 cycles of composting are possible per year, depending on how often the Envirocycle™ Composter/Composteamaker™ is rotated and how small the ingredients are in the composter.

Composting Ratio of the Ingredients: 50% Dry/Brown materials and 50% Wet/Green materials, and they must be kept moist, **not wet**, inside.

2. What is Composting?

Composting is a process of transforming organic matter into humus under specific conditions. It speeds up the natural process by using a varied mixture of organic matter with ideal conditions, thus allowing large numbers of microorganisms to thrive and transform the organic matter into humus. Compost is the foundation of organic fertilization. It improves soil structure by making it light and porous.

It contributes some minerals but mainly releases the minerals that naturally occur in soil, making them more readily available to plants. Flowers and vegetables become stronger, more vigorous and more disease-resistant.

Why Compost?

Compost provides an excellent alternative to commercial chemical fertilizers, which disturb the natural balance of the soil. By composting, we can reduce our volume of household waste by about 30% and make a responsible contribution to sound waste management.



3. Traditional Composting vs Rotating Composting with Envirocycle™

Composting is sometimes described as an art or a science. In fact, to succeed in making good compost in a compost pile or a traditional container, you need a certain amount of practical experience.

City dwellers have neither the time, space, nor the tools to practice this method. The Envirocycle™ Composter/Composteamaker™ was designed to facilitate the process. With its rotating design, the Envirocycle™ Composter/Composteamaker™, composting is almost effortless in your backyard, balcony, terrace, or garden.

4. Composting Process

When a sufficient quantity of organic material has been collected, the composting process begins. It continues for a period that varies according to the nature of the materials used and the conditions created. The process can be divided into four phases, according to the temperature present at different times.

Four main stages in decomposition of compost:

FRESH:

At this stage, the materials being composed are dark in color and still easily recognizable; micro-organisms are sparse and just beginning their activity; a rise in temperature can be observed - this is the heat phase.

PARTIALLY DECOMPOSED:

At this stage, the compost has a mild odor and contains many micro-organisms. The materials being composted are very loose and brittle, and almost unrecognizable; mushroom may be present, aiding to decompose the most resistant materials: cellulose, lignin, and wood. Chemical exchange takes place during this stage - this is the gaseous and liquid phase.

MATURE:

At this stage, recombination of decomposition products from preceding stages occurs - this is the humidification phase.



AGED COMPOST:

At this stage, the compost looks almost like soil (loam); it resembles natural topsoil. Organic matter and nitrogen content are low - this is the mineralization phase.

In reality, the four phases overlap, but there is always one that predominates, depending on the length of time composting and the types of materials used.

Quoted from R.J.A.E. "Le respect de l'équilibre naturel" May 1989.

5. Materials to Use

Essentially the materials added in the composter will be two types: moist and dry. The composting process works best when the organic pieces are small.

Wet / GREEN: Moist composting materials include garden waste (non-perennials), fruit and vegetable peels, tea bags, coffee grinds (complete with filter papers), table waste, egg shells, peanut shells, plant trimmings - all are high nitrogen materials that will feed the microbes a rich diet.

Dry / BROWN: Dry materials are things like hay, straw, fallen twigs, dry grass clippings, (Leave the mown grass on the lawn for a day before collecting to allow it to dry out enough - fresh grass added in the composter tends to compact and not rot as quickly as other materials.) sawdust, all kinds of tissue paper, newspaper (shredded), paper and cartons (shredded), egg cartons (shredded). Kitchen and garden wastes are excellent composting materials, with certain exceptions.

These two categories should be avoided:

- Paper and cardboard may be used in limited quantities; however it would be preferable to recycle them through a collection program if one is available in your neighborhood.
- Excrement may contain pathogens that are difficult to eliminate during domestic composting; it is better not to add it to a composting container.



6. Important Parameters

Essentially the materials added in the composter will be two types: moist and dry. The composting process works best when the organic pieces are small. Composting is a natural process through which organic material is converted into a soil-like product called compost or humus. The process works with the help of micro-organisms such as bacteria combined with air and moisture.

AERATION, MOISTURE

Moisture and aeration during composting are inversely proportional. The more water there is, the less air, and vice versa. There must be enough aeration to ensure aerobic decomposition. Many more micro-organisms flourish in the presence of air.

Proper aeration also eliminates the risk of unpleasant odors. Moisture content should be between 50% and 60%, about as damp as a sponge that has been wet and squeezed out.

TIME AND TEMPERATURE

The more heat compost generates the faster it decomposes. If you use an equal blend of brown and green materials, reduce the size of materials to be composted and provide adequate moisture and air, you will then create a hot, fast compost.

C/N RATIO

Organic matter contains varying proportions of carbon and nitrogen. In general, dry materials such as dead leaves, straw, strips of cut newspaper, sawdust or earth are very rich in carbon, while moist materials such as kitchen wastes and grass clippings contain a fair amount of nitrogen.

The proportion of carbon and nitrogen is very important for proper composting. If there is too much material rich in carbon (dry), composting will take place very gradually. Conversely, if there is too much nitrogen-rich (moist) material, decomposition will be very rapid, but there is a risk of odor, since the excess nitrogen will be given off as ammonia.

The ideal C/N ratio is 30/1. However, it is not necessary to do any complicated calculations to come out the right proportion. What you need to know is that dry materials should always be mixed with moist materials. If the compost does not decompose, there is too much carbon; if there is an odor, add some dry materials.



7. How to Use Your Compost

Compost can be used throughout the yard, in the vegetable garden, in the flower beds, on the lawn (if it has been sifted), under trees and hedges, etc.

The lawn and most ornamental plants will benefit from mature compost that resembles topsoil. In the vegetable garden, the needs of different vegetables vary a great deal. The "compostea", also known as compost tea or liquid fertilizer, can be used for indoor plants, gardens and lawns. The compostea is very concentrated and needs to be diluted 1/10 with water (1 part of compostea with 10 parts of water).

8. FAQ

Q1. How exactly does the Envirocycle™ Composter/Composteamaker™ work?

A. All you have to do is open the lid, throw in the waste, close the lid and rotate the unit to mix the contents well (at least 3 times/week to maintain active composting) and there you have it!

The Envirocycle™ Composter/Composteamaker™ requires no mixing tools other than your hands to rotate the drum - without getting them dirty!

One cycle of the decomposition process takes a period of about 30 to 40 days, but the maturing time of a composting cycle varies depending on how often the composter is turned and the size of the original ingredients. In principal, the more often the composter is turned and the smaller the ingredients, the faster the total composting time.

Q2. How do I know when the maturation period is completed so that I can empty my compost?

A. At the end of the 5th week, stop adding waste to the composter for 5 days. During this final maturing period, accumulate new waste in a separate plastic container. At the end of the 6th week, it is now time to empty out your composter. Once your composter is empty, you may begin to add new waste to it. Composting demands a minimum of 2 cubic feet of varied waste (dry and humid). It is always important to keep the composting materials moist.



Q3. How do I empty out my composter?

A. To rapidly empty out your composter:

- a) Remove the barrel from the base, place it on the ground and roll it to the area in which you want to empty it out
- b) Lift off the lid
- c) Turn the barrel face down to the ground
- d) Shake the barrel and the compost will fall out

Q4. Should I use activated chemicals in order to accelerate the decomposition process?

A. Activated chemicals are not necessary. Instead add a shovel full of earth or compost obtained from your first collection to accelerate the decomposition process of the next composting cycle.

Q5. What should I do when the compost barrel is hard to turn?

A. If the barrel is hard to turn, make sure that the material inside is moist but not wet. It may also indicate that the composting cycle is at its mature state.

Q6. How do I make use of compost tea?

A. The liquid (compost tea) that is collected in the base is an excellent source of nutrient-enriched sustenance for trees, flowers and indoor plants. Due to its high concentration, the compost tea should be mixed with 10 parts of water (10/1).

Q7. Should I add water to the compostable materials?

A. The Envirocycle™ Composter/Composteamaker™ does not need to have water added because the interior level of humidity remains ideal.

Q8. How does one equalize the carbon-nitrogen ratio required for composting?

A. To equalize the carbon-nitrogen ratio, pile up your dead leaves in bags; when added to your household wastes, they will help equalize the carbon-nitrogen ratio. As an alternative, newspaper cut into strips will also work.



Q9. Can I use the Envirocycle™ Composter/Composteamaker™ during the cold winter months?

A. In winter, the composting process is slowed down, but you may continue to add fresh material to the compost. In spring, the compost will thaw and the process will resume. You may place the unit on a balcony, in the garage, or close to a doorway.

Q10. I'm experiencing bugs and the compost doesn't seem to be breaking down very quickly?

A. Moisture and aeration during composting are inversely proportional. The more water there is, the less air, and vice versa. There must be enough aeration to ensure aerobic decomposition. Proper aeration and proper C/N ratio also helps to eliminate the risk of unpleasant odors and bugs.