



*Natural Organic Solutions*

## MAKING COMPOST - A NATURAL RECYCLING PROCESS

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Gardeners often have difficulty disposing of their garden waste. In nature organic waste decomposes. Raw materials like leaves are transformed into nutrients for the plants and valuable humus for the soil. These by-products of the garden and home can be turned into compost with no more effort than it takes to put them into bags and have them removed.

### **THE ORGANIC CYCLE**

From spring to autumn, nature is busy growing and producing. In autumn the leaves fall from the trees – all the ‘superfluous’ organic material falls to the ground. Nature does not let these valuable raw materials go to waste. Millions of insects and bacteria decompose these raw materials into humus, which in turn makes the plants grow and thrive through the next year.

### **WHAT HAPPENS WITH THERMO-COMPOSTING?**

**Thermo composting harnesses the heat of the sun and adapts it to accelerate the process of decomposing, therefore speeding the process up.** Many different insects and organisms are present in the process of making compost - earthworms, centipedes, bacteria, fungi and many more. The bigger organisms break down the organic material and then the smaller ones decompose it further. The more organisms present, the quicker the rotting process. As organisms decompose the organic materials, their body heat causes the temperature in the pile to rise, at times reaching as high as 70°C in the Thermo Composter. At this time the pile will begin ‘settling’, which is a good sign that processes within the pile are working properly. The pH of the pile will be very acidic at first, at a level of 4.0 to 4.5. By the time the process is complete the pH should rise to about 7.0 to 7.2.

### **WHY MAKE COMPOST?**

Saves at least 30% on garden water usage in peak watering times. The soil stays moist for longer. The temperature of the soil remains constant, to the advantage of the plants. Mulching prevents soil compaction, which aids root growth, and makes the soil easier to cultivate every year, as it is more fertile. Compost will save you buying fertiliser as the compost provides many of the necessary nutrients. Compost humus enriches the soil. You will also save money on refuse removal.

### **CONSTRUCTING THE PILE**

Materials should be placed in layers. This ensures that the materials are added in the proper proportion. Activate the materials with ‘Radivit Universal Composter’ agent by sprinkling over each layer. See to it that the compost is always as damp as a wrung out sponge – not too dry and not too wet. If the compost is too dry add water. If it is too wet add some shredded newspaper. The compost should be well mixed after every 2-3 weeks. This ensures that the micro-organisms receive enough oxygen. In winter the decomposition process slows down. It is advisable to re-activate the compost in the spring by sprinkling ‘Radivit Universal Composter’ throughout the pile.

#### **Mixed Garden Refuse**

It is advisable to shred woody prunings before adding them to the pile. If the garden waste consists mainly of woody and dry components, add things like grass cuttings to add nutrients and moisture. If the waste consists of mostly moist components add shredded dry materials to balance it.

Since grass cuttings on their own are very damp, nitrogen rich and difficult to aerate, one should add shredded wood material to it in a 2:1 ratio. This would make the mixture looser and more permeable. One could however also add dry leaves or sawdust or shredded newspaper to the grass cuttings.

#### **Organic Kitchen Waste**

Only use non-fatty kitchen waste.

Establish a 10cm layer of garden waste, grass cuttings or shredded newspaper between the layers of kitchen refuse, to minimise dampness (excretions from this waste). Shredded newspaper is very useful as a loosening agent and also aids with absorption of juices.

THE LENGTH OF TIME NECESSARY FOR THE COMPOSTING PROCESS DEPENDS ON THE CARBON-TO-NITROGEN RATIO, SURFACE AREA PARTICLES, AERATION, MOISTURE AND TEMPERATURE.

### **WHAT MATERIALS SHOULD AND SHOULD NOT BE USED?**

One can use practically any organic waste produced in the home and in the garden for making compost. One should not use any products that are not degradable. Remember that compost means 'putting together', therefore the more materials used the better and more diverse the compost will be. One should never add too much of any one degradable substance.

#### **YES**

Non fatty kitchen waste  
Grass cuttings  
Fallen leaves  
Shredded garden refuse  
Crushed eggshells  
Tea / coffee bags or grounds  
Wood ash  
Shredded newspaper/ egg boxes

#### **NO**

Bones, meat, fatty or cooked kitchen waste  
Potato peelings  
Glass, metal or stones  
Plastic  
Diseased garden refuse  
Weeds that carry seeds  
Coal ash  
Shiny chemical treated paper

### **WHAT TO DO WITH THE COMPOST**

Use compost in flowerbeds and under trees and shrubs. The compost must be worked lightly into the soil – never dug in deep.

Do not cover freshly planted seeds with a thick layer of mulch – they will not be able to penetrate it.

### **THE THERMO COMPOSTER**

Due to the double wall layers of the Thermo Composter temperatures of up to 70°C can be maintained – this is the ideal requirement for making compost fast.

The Thermo Composters are: -

Very sturdy and weather resistant.

Produced from recycled, synthetic materials.

Fitted with 2 large insulated lid flaps.

Fitted with 2 removal flaps at the bottom.

Can be removed from the compost just as one would lift a cake pan from a cake.

Hygienically clean – dogs, cats and rodents stay out.

Very easy to construct.

### **ACTIVATOR : 'RADIVIT UNIVERSAL COMPOSTER'**

This is an organic composting agent, which contains all the main compost bacteria together with enzymes and fungi cultures. Added nutrients provide an easily digested nutritional medium for the micro-organisms and thus facilitate rapid, optimum rotting, even for materials with low levels of nutrients.

The Thermo Composters are made in Germany by W.Neudorff GmbH KG..

They are marketed by BIOGROW CHEMICALS (PTY) LTD, P O Box 1269, Gansbaai, 7220.

For more information on Thermo Composters and our full range of organic spray materials contact:

WAYNE GABB            082 552 4124        ADRIAN KUIPER            083 222 5464

CAROLINE GABB        082 554 0811        BIOGROW OFFICE            028 313 2054

WebSite: [www.biogrow.co.za](http://www.biogrow.co.za)

E-mail: [biogrowchem@iafrica.com](mailto:biogrowchem@iafrica.com)

Fax:            028 313 2084

BIOGROW CHEMICALS MAKE ENVIRONMENTALLY FRIENDLY GARDENING POSSIBLE... this is an integrated approach to gardening based on the principle that a healthy environment creates healthy plants. Disease, insect and soil management are integrated with the development of natural predators and minimum contamination of the environment. Our products are manufactured to these principles, making them safe to use around children and animals. They have low residues and can be sprayed up to the day of harvest. They break down quickly and do not persist in the environment. They are soft against beneficial insects and are aimed at specific targeted pests.

**ENJOY GARDENING IN A IN A SAFE AND NATURAL WAY!**