

- Allow the level of the Compost to rise to at least past the bottom of the lower Lung Cowl and ideally to the top of the Access Door. Either simply makes harvesting the Compost easier. When you are harvesting the Compost from the lower half of the Aerobin only ever use a hand Garden Fork – 3 Finger/Hooked – and claw the Compost out into a shallow container positioned against the base edge. Never attempt to lift (shovel or fork) the Compost. Ideally remove Compost from both sides (thru both Access Doors) – then replace the Access Doors and collapse the Compost thru the top opening and thereafter continue filling the Aerobin as you have been doing.

#### **Closing Remarks**

Your Aerobin, as with all Composters will operate as well as it is operated. If you achieve and maintain the correct C:N ratio, Moisture% & Bio-Density – so the correct balance of the ingredients that you are loading into your Aerobin, nature and the Aerobin will do everything else.

Composting isn't new, it's been around for over 2,000 years, and your Aerobin is simply a device that provides an ideal environment for highly efficient and healthy aerobic composting and in most climates, for 12 months of the year.

If at any time you need assistance drop us an email - [info@aerobin400.com](mailto:info@aerobin400.com)

#### **Good Composting**



## **AEROBIN & HOME COMPOSTING”**

(Published March, 2017)

[ENGLISH LANGUAGE VERSION]

**Aerobin**<sup>®</sup>  
The waste revolution for modern living

#### **Aerobic Composting**

Aerobin was developed & designed to enable the recycling (composting) and re-use of most organic materials that are generated at the household, as a practical alternative to these materials being collected, transported and dumped at landfill sites or incinerated.

In the natural process of aerobic decomposition, the work is performed by healthy decomposer microorganisms. The organisms are a living thing (not unlike us humans) – so they too require food (carbon & nitrogen), air and water. When provided with the correct balance, they will produce compost very quickly. Organic materials are the food source providing the carbon & nitrogen. The organisms use carbon for energy and protein to grow and reproduce. Carbon-rich materials tend to be dry & brown such as dried leaves, straw, wood chips, paper & cardboard etc. Nitrogen materials tend to be wet (so the source of moisture) & green, such as fresh grass and fresh fruit & vegetables scraps. A C:N ratio ranging between 25:1 and 40:1 is optimum for rapid decomposition.

The Aerobin provides both an optimum environment along with providing the source of oxygen, via the air that is circulated thru the biomass materials via the patented aeration lung, which supports the healthy microorganisms and in doing so, a highly efficient composting effort is achieved.

#### **Getting your Aerobin underway**

A sure way to get the composting process underway quickly, is to first add a layer (50mm or 2”) of active compost across the base of the Aerobin. This can be either healthy compost from another composter or compost purchased from a garden centre, just ensure that it's not sterilised.

Before you start loading materials into the Aerobin go to our website - [www.aerobin400.com](http://www.aerobin400.com) - you will see under 'INFO & RESOURCES' a tool that enables you to 'SIMULATE COMPOSTING IN YOUR AEROBIN' and in a practical sense the simulation results would be very close to the results you will actually obtain using these ingredients (and weight of ingredients) in your Aerobin. Also in the event that you had any issues with your composting process use the simulator to enhance or refine the process.

Here are some recipes examples that have been run through the simulator on the Aerobin website and have acceptable C:N, Moisture & Bio-Density results (the correct balance):-

Example 1.

INGREDIENTS	WEIGHT	COMMENTS
Fresh Vegetable scraps	0.5 kgs	All ingredients mixed together
Fresh Fruit Scraps	0.5 kgs	
Lawn Cuttings	0.5 kgs	
Newspaper Sheets (Balled)	0.2 kgs	
Leaves Loose/Dry	0.2 kgs	
Cardboard Strips	0.1 kgs	Pushed into biomass vertically (on their edge)

	C:N	MOISTURE	BIO-DENSITY
Result	37:1	65%	0.28

All readings fall within acceptable range bands

Example 2.

INGREDIENTS	WEIGHT	COMMENTS
General Green Waste (Pruning's)	5.0 kgs	All ingredients mixed together
Lawn Cuttings	3.0 kgs	

	C:N	MOISTURE	BIO-DENSITY
Result	39:1	50%	0.39

All readings fall within acceptable range bands

Ingredients should be premixed before they are loaded into the Aerobin – do this in a bucket and that's the last time you will have to touch them. This will avoid concentrations of any individual material.

Don't add glossy ink printed magazines or cardboard into the Aerobin as the inks are mostly likely not biodegradable and possibly toxic.

Keep the materials coming as your Aerobin will perform best when the biomass is at least half fills the Aerobin. This can be often achieved with loads of garden green waste – pruning's, cuttings, lawn cuttings etc – make sure all woody materials are either shredded or mulched – any woody material will decompose at a much slower rate than the majority of most other ingredients and therefore dictate when the compost can be harvested.

**Ready measures of how the Aerobin is operating**

Here are some basic measures that will tell you how the composting process is working in your Aerobin:-

- After the Aerobin has been operating for say the initial 6 weeks (& possibly sooner), lift the Lid off and place your face over the biomass – you should sense heat rising and hitting your face – this would normally support that a healthy aerobic decomposition is taking place – as long as there are no bad odours (smells) coming from the biomass. If there were bad odours then the composting effort has gone or is going anaerobic and corrective action is immediately required – either isolate and remove the offending materials or completely empty the Aerobin & start again.
- When you remove the 2 x Access Doors the biomass materials – particularly the material that is sitting on the Base of the Aerobin should only ever be 'damp' – never 'wet' or 'saturated' with moisture. This would suggest that there is simply too much moisture within the Biomass and one or both of the following could be occurring – (1) the air flow through the biomass is being impeded by the excessive moisture content of the biomass and/or (2) the healthy microorganisms are perishing – drowning in the excessive moisture content of the biomass. As a test – if you bury your hand as deep as possible into the biomass – grab a handful of the material – remove your hand and then squeeze and look at how much moisture is being displaced from this material it should only mimic what you would displace from a moist kitchen sponge if you carried out the same squeeze test. Too much moisture and you will need to empty the contents of your Aerobin and start again – too little and you will need to add water to the biomass – sprinkled from a watering can over the entire upper surface – say 1 Litre or 2 Pints only - then leave for 24 hours and repeat the squeeze test again – if still too dry add another dose of water.

**Compost & Leachate/Compost Tea**

- Compost should be seen forming on the base of the Aerobin (remove the Access Doors) anywhere within 8-12 weeks from starting. The Compost should be dark brown in colour, earthy in texture and moist. (See photo page 4.) Regularly open both of the Access Doors – fortnightly – and see what is happening - this will also avoid a build-up on the internal ledge and making opening the Access Doors an easy task.
- Leachate or Compost Tea should be collecting in the Leachate Tank of the Aerobin within 4-6 weeks from starting. For ease of collection attach a piece of flexible hose to the Tank Tap & have it drain into a receiving container or bottle, leaving the Tap in the 'on' position all of the time.