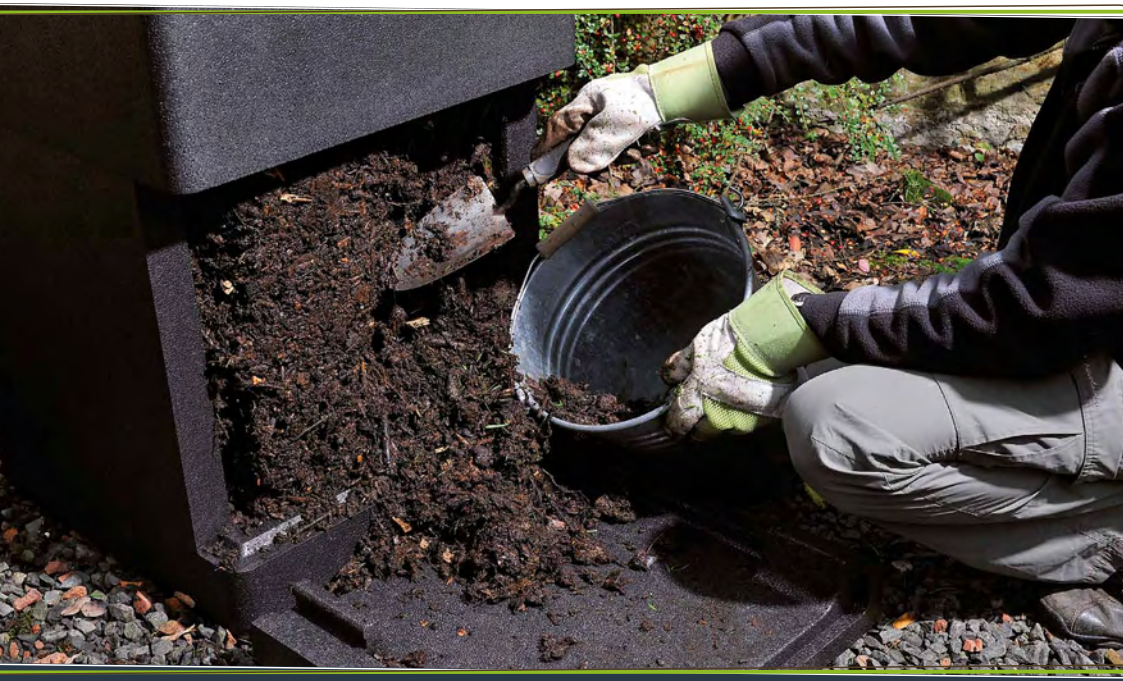
HOTBIN®
composting

welcome to HOTBIN composting



lets start composting!

USER GUIDE

INSIDE...

- Getting Started
- Adding Waste
- How the HOTBIN Works
- Care and FAQ's

HOTBIN is designed and manufactured in the UK

NOTE: please see inside of leaflet for **fig.** (product parts) and **sec.** references

how the hotbin works

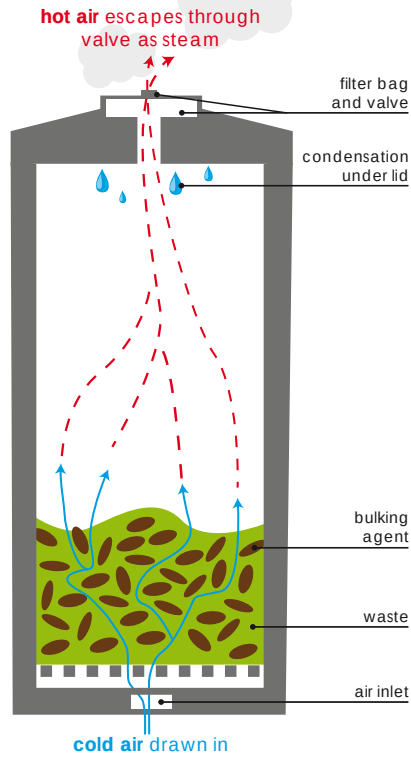
Bacteria break down waste as it is added to the HOTBIN, generating heat as a by-product. Waste should be mixed with **shredded paper** (controls moisture) and **bulking agent** (creates air spaces).

HOTBIN is an aerobic composter drawing cold air (oxygen) in through the base air inlet which then passes through the waste using the free air spaces created by adding bulking agent.

The air circulates and rises feeding the bacteria with oxygen. The heat produced through bacterial activity converts the moisture created during the decomposition process into water vapour which leaves the bin as steam.

The HOTBIN works as an insulated chimney, with three layers, an upper hot active layer, maturing warm middle and cool base.

HOTBIN makes hot composting easy by maximising what nature does naturally - essentially keeping bacteria happy.



top tips

1. Always Clean Up

Keep the HOTBIN clean at all times, ensure no food waste is left around the base, hatch **fig.4**, lid **fig.2** or surrounding area.

Wipe around lid, hatch and door edges clearing any loose pieces that may create an imperfect seal. This will help contain odours which may attract vermin and foxes.

2. Look after your HOTBIN

Take care when removing compost or mixing new waste into the top of the bin. Avoid damage when using strimmers, rakes and other garden tools around the HOTBIN.

Don't use tools to lever off the hatch **fig.4**, don't force the hinge lid backwards **fig.2a** and keep the valve **fig.1** free of dirt & snow.

3. Location

Place HOTBIN on a hard, flat surface to discourage the underside from being used as a nesting site.

4. Keep it Closed

Keep the hatch **fig.4** and lid **fig.2** tightly closed. Secure cam straps **fig.3** around the hatch; any gaps in door/lid seals will result in the bin losing both heat and odours

5. Take Care of Accessories

Keep bulking agent **sec.3** as dry as possible and take care of tools and the user guide.

Do not remove the fixture plate **fig.1** or aeration valve and leave the internal filter bag in place at all times.

KEY Not working | OK - working but not at full speed | Working well and hot composting

happy bacteria need ...

1. FOOD

Bacteria produce heat when breaking down waste, waste is digested at different speeds affecting the speed of heat release **sec.2**.

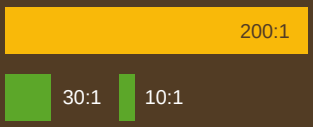


Waste Size



Increasing surface area accessible to bacteria increases the speed of breakdown. Chop/shred waste to 4cm but preferably less.

Carbon/Nitrogen Ratio



Waste Quantity

Minimum of 5kg per week.
Maximum of 5kg every other day.

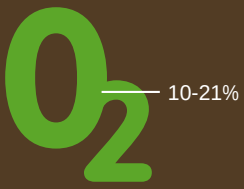
2. WATER CONTENT



Bacteria need water to grow and aid digestion. Too little restricts bacterial growth, too much and waste becomes soggy, blocking the air flow (oxygen) that bacteria need.

Counteract overly wet waste with shredded paper **sec.3**.

3. OXYGEN



Aerobic bacteria need oxygen. Not enough allows their anaerobic cousins to take over. This creates a smell, releasing methane (X25 Green House Gas potency).

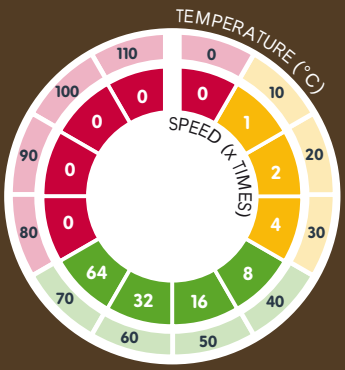
Add bulking agent to provide waste with oxygen **sec.3**.

4. WARMTH

Bacteria digest waste **32 times faster** at 60°c than at 10°c.

As a rule of thumb, if compost takes 18 months in a cold heap at 10°c it will take 18 days in a HOTBIN running at 60°c.

Useful Fact: Bacteria start to die off when temperatures exceed 70°c.



1 setting up your hotbin

a



situate the HOTBIN

place the HOTBIN on any hard flat area, in sun or in shade.

b



attach cam straps

provide support **fig.3** against pressure exerted by compacted compost.

c



open valve by 2mm

this valve **fig.1** should be kept clear as it allows the steam to exit the HOTBIN.

DO NOT remove the hatch until first batch of compost is ready

2 select your start up method



a

Fast Start

"I have LOTS of waste"

Great! Add in a base layers worth of waste **sec.2** and don't forget bulking agent and shredded paper **sec.3**.

Old compost pile? Add a handful to accelerate, shut the lid and leave for 48 hours. **No peeking**!

approx 2-6 days

b

Patient Start

"I don't have much waste"

Add waste **sec.2,** (with bulking agent and shredded paper **sec.3**)as and when it becomes available until you have built your base layer.

Note: Temperature inside will rise slowly.



approx 2-6 weeks

3 setting up the base layer

a

Add lots of easy to digest waste **sec.2**.

Do not add cooked food waste until the bin is running between 40-60°c see **feeding HOTBIN section** below.



b

Build base layer to 40cm deep (top of the hatch height **fig.4**).

ie. approx 80 litres, roughly 16 small food caddies or 2 average grass boxes.
(always add a mixture of waste)

c

Remember to mix in enough bulking agent and shredded paper **sec.3** with your waste.

Tip: To aid aeration add a mesh of twigs at the bottom of the HOTBIN before starting the base layer.



4 composting in winter





Y

When it's really cold, bacteria may need a little help to warm up and start digesting waste.

Use the kick-start bottle **fig.8** and follow the label instructions to get the HOTBIN going.

N

Tip: If you leave your bin for a couple of weeks unfed and it cools down, you can also use the kick start bottle **fig.8** to get it back to temperature.
Add with fresh waste, bulking agent and shredded paper.

5 feeding the hotbin



a

Before Adding Waste

check the temperature

There is a variance between the lid thermometer and internal temperature. If adding waste that requires **HOT** composting **sec.2**, check the internal temperature using the additional thermometer **fig.7** in the top 5cm of waste.

b

Add waste into the top of the bin and use stirring rake **fig.6** to mix **(never layer)** in paper and bulking agent **sec.3**.

!

Minimum waste: 5kg a week.
Maximum waste: 5kg every other day.
Tip: 5kg = roughly a small 5L food caddy.

6 harvesting compost



mulch compost 30 **days** 90 rich compost



To Remove Compost

Remove cam straps, then use finger grips on the sides of the hatch to firmly pull door away from the bin.
Don't be afraid to give it a good tug!

Use the raking stick **fig.6**/trowel to carefully remove compost.

Tip: Prevent compost falling down by removing the core first and leaving the sides to last.

!

Notes

1. Parts of your first base layer may not fully compost. Use as mulch or gradually add this back into the HOTBIN with fresh waste as per feeding instructions above.

2. Avoid adding old compost in large amounts - add handfuls. Partially composted waste will have lost food food energy for bacteria, so always mix in with fresh waste.

Need more help?

Please call us freephone 0808 168 8499 (Mon - Fri).
Sign up for the free monthly HOTBIN newsletter.
Follow us on social media channels.
Join the free forum and chat with other composters.



Section 1 **[sec 1]**

HOTBIN Parts

Anatomy of the HOTBIN



fig. 1 Fixture plate with lid thermometer, aeration valve and bio-filter bag to control odours.

fig. 2 Keep lid tightly closed and lip clean after adding waste.
fig. 2a **Do not** force hinged lid backward.

fig. 3 Cam straps secure hatch panel against pressure exerted by compacted compost.

fig. 4 Hatch panel to remove compost. Top of the hatch indicates suggested base layer height.

fig. 5 Aeration base plate disperses air through the bin utilising air spaces created by bulking agent.





fig. 6 Stirring rake for use when mixing in new waste and removing compost.



fig.7 Internal Thermometer

Essential if dealing with waste that needs to be HOT composted **sec.2**. Insert additional thermometer into top 5cm of waste for an accurate reading.

See **'feeding the bin'** in setup instructions.



fig.8 Kick Start Bottle

Follow instructions on bottle.
If the temperature of the HOTBIN does not rise after two uses contact support as the issue may be to do with blocked aeration.

A Quick Note on Vermin



Rats can and will chew through almost anything from plastic to concrete.

Follow our care advice above to minimise the risk of rodents being attracted to the bin.

Also please ensure that the HOTBIN is located in an area that hasn't had any prior rat problems.

Section 2 **[sec 2]**

Waste Digestibility Table

*Visit HOTBIN help online for specific advice on composting these items.

speed of waste digestion by bacteria

easy (fast)	medium	hard (slow)
chicken pellets blood and bone meal nettles and comfrey vegetables and peelings fruit and peelings grass clippings*	straw/hay manures tea bags compostable bags **Items That Require Shredding** printed & office paper glossy magazines corrugated cardboard	shells (fish and eggs) sawdust & wood shavings twigs and branches coffee grounds **Items That Require Shredding** leaves newspaper cereal packets and card
ONLY Add The Following When HOT Composting (40-60°c)		
cooked food waste meat & fish (inc skins) leftovers (inc pet food) pasta & rice mouldy bread & cakes	diseased plant material used cat litter*	pet bedding & waste* bones weeds* some require 60°c

Section 3 **[sec 3]**

Bulking Agent and Paper

Unlike cold composting, HOTBIN is based on aerobic composting methods. This means that bacteria need oxygen, food and the right balance of water to hot compost effectively.

bulking agent to maintain aeration — add in — **shredded paper** to balance moisture

your caddy of waste then use to measure bulking agent and paper



5:1



2:1



What is It?

Partially composted wood chip, this creates air spaces in the waste providing bacteria with oxygen.

When to Add?

With all waste as it aids aeration in the HOTBIN.

note: quantities apply to any waste caddy size

What is It?

Shredded paper or corrugated card helps balance moisture levels in wet waste such as food.

When to Add?

Add with all wet waste - please see table below.

helpful information

Always Chop Waste



Chop waste to less than 4cm and remember to shred waste where necessary. This increases surface area accessible by bacteria and speeds up waste breakdown.

How Much Water is in Waste?

Adding shredded paper is esential to help control moisture levels in the HOTBIN and keep it working aerobically. However how much water is in certain types of waste?

Importance of adding shredded paper or card →

10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
% of water content			garden waste		grass	vegetable peelings	food waste	salads, cooked food	

NOTE: Ratios are starting guidelines based on putting in cooked food waste. You may choose to alter these ratios depending on the type of waste you are putting in. Remember it's easier to fix a bin that's too dry than one that's too wet.

Bulking agent is available to buy online or you can make your own - see post online.

faq's

Help, My Bin Smells!

A boiled cabbage odour is normal from the top layer of waste. Putrid smells however can indicate an anaerobic bin. This can affect the top (stage 1) or the whole bin (stage 2). To fix stage 1 mix two handfuls of bulking agent & shredded paper into the top layer, close and leave for 2-3 days. If no change the base layer has likely become anaerobic (stage 2). Seek further advice online or contact us.

I have Brown Liquid Leaking from the Bin -'Leachate'?

Leachate is a liquid fertiliser, an espresso cup full a week is normal (few mm per day), any more could indicate waste is too wet, see **"my bin smells"** faq above.

I Can't Get the HOTBIN Hot.

Check valve placement, waste is chopped/shredded to the correct size and bulking agent/shredded paper ratios. Contents should be mixed (not layered) . Ensure thermometer reads 40-60°c not °f and note the temperature difference between the lid/internal thermometer fig.7.

There are Worms in the Bin?

This is not a bad thing. Worms can survive in the cooler base layer but are unable to survive the hot upper layer and you may see them crawling out to escape.

More Help Required!

Check out our extensive online help.

health and safety

Composting is a natural biochemical process involving bacteria and fungi. Humans have been composting safely for thousands of years, however we suggest adhering to basic standards of hygiene.

- Always wear gloves, cover cuts and wash hands after composting.
- **DO NOT** leave kitchen caddy, gloves or other compost equipment near food preparation surfaces.
- Take appropriate precautions if you suffer from asthma or related respiratory conditions e.g. wear a dust mask.
- Take care when handling hot water bottle and chopping/shredding waste.
- Check the temperature is at 40°c with an internal thermometer before adding cooked food waste and pet waste.

Please read full health and safety advice online under the HOTBIN help section.

HOTBIN has a 3 year manufacturer's guarantee. This excludes damage caused by wildlife and undue care.

HOTBIN Composting
DS Smith Plastics, Cornhill Close, Lodge Farm Industrial Estate, Northampton, NN5 7UB
email: help@hotbincomposting.com | **web:** www.hotbincomposting.com | **call:** 0808 168 8499