

Installation

How much space do I need for installation?

The floor space required will be 2.5 x 2.5 sq.feet. In addition a clear wall or ceiling space of 7 x 3.5 feet will be required for the balloon bag and a nook in your kitchen for the stove.

The balloon bag may also be mounted on a specially designed free standing frame on special request.

How much time does the installation take?

The process will normally be completed in about 2.5 working hours.

What utilities arrangements are required?

A 5 amp plug point with earthing within 3 feet of the location of the digester and a drain within about 10 feet are required. In addition about 200 liters of water will be required during initial start-up.

What is the installation process?

Our service personnel will conduct a site visit to freeze location of the digester, balloon bag and stove. Availability of utilities will also be checked and the client will be informed of any modifications to be carried out. The date and time of installation will be scheduled.

During installation, the digester will be charged with starter bacteria.

The digester is then feed about 1 kg of waste and left for 2 days for the bacteria to multiply. Another visit is conducted to check the installation and quality of gas produced. After which you may start feeding the digester following the Start-up Feed Schedule provided as part of the User Manual and enjoy the benefits.

Can Dedko be installed in my apartment?

Yes! Dedko has evolved so that it can live on your balcony. All that is required is the necessary space.

Can I install Dedko on my own?

Certainly! We can ship you a kit provide instructions and remote support.

Operation & Maintenance

What organic waste does Dedko feed on?

All kinds of wet organic items such as vegetables and their peels, human food scraps, milk, meat, eggs, grains, etc. It may be easier to look at what is NOT suitable for Dedko.

DO NOT FEED LIST:

1. Chemicals
2. Medicines
3. More than 250 g of sweets (chocolate, mithai, etc.) per day
4. Wood, twigs and similar items
5. Paper & plastic

Small quantities will **not** affect Dedko.

How much fuel-gas well Dedko provide ?

About 10% of the feed weight. Higher quantities of gas will be generated from high calorie feed such as grains and less from leaves.

What is the type of fuel gas generated?

The fuel gas generated is commonly referred to as bio-gas. Its composition is about 70% methane with the balance being carbon dioxide. Traces of moisture and Hydrogen Sulphide are present.

Does the gas smell?

The gas when burned in the stove is practically odorless. The good news is that if it leaks, unburned, it will be readily detected by a human; the smell is that of rotten eggs and very unpleasant. Any leakage must be attended to.

Does Dedko smell?

No. There is no smell from the digester. It is completely sealed. The organic fertilizer generated has an mild odor.

What about pests?

Pests are not attracted to Dedko as it is completely sealed.

How much can I feed Dedko?

2 kg of feed per day.

What may happen to Dedko if it is feed with items on the "DO NOT FEED" list or fed beyond its rated capacity.

Dedko may get "indigestion" and may stop the production of bio gas and organic fertilizer. Call for service. The service personnel will flush dedko and recharge it with an active culture of bacteria.

How should I feed Dedko?

Feed a maximum of 2 kg per day . Crush the feed along with water to make a "juice" in a mixie or blender. All along with an equal quantity of water.

Can I feed Dedko more than once a day?

Yes. Just ensure that total feed in 24 hrs is within the 2 kg limit.

What is my utility cost?

If you live in a tropical climate, the maximum cost is equal to that of ½ a unit of power and 3 liters of water.

What maintenance does Dedko required?

A partial drain may be required approximately once in 5 years.

Can I use my own stove?

No. Dedko comes along with its specially designed stove. Commercial LPG or propane stoves **will not work** with Dedko.

What if I don't use Dedko and the gas fills up the balloon?

Dedko has been designed to store about 200g of fuel gas. Any gas that is generated when the balloon is full, will be vented automatically.

Is Dedko safe?

Yes. However, as the process involves combustion, care and common sense must be observed. Safety precautions to be adhered to such as : any leaks if detected, must be attended to, smoking should NOT be carried out in the vicinity of Dedko, etc.

In general, Dedko is considered to be much safer than a traditional LPG or CNG use. The following tables goes through some of the parameters and their influence on safety:

Parameter	LPG	CNG	Dedko
Density compared to air	Heavier	Lighter	Lighter
Quantity stored	14.2 kg (domestic cylinder)	Continuous supply	200 g
Sensing leaks	Odorless. Additives added	Odorless. Additives added	Naturally detected by odor
Operating pressure	2000 mbar	Society: 4000 mbar Kitchen: 100 mbar	30 mbar

Parameter	Safety Consideration
Density compared to air	A lighter gas will rise and vent into the atmosphere. A heavy gas like LPG collects and makes the environment hazardous.
Quantity stored	In case of a fire, Dedko has a maximum of 200 g of gas. This is much safer than the large quantities of combustible gas available with LPG or CNG.
Sensing leaks	Easy detection implies higher safety.
Operating pressure	Lower pressure implies higher safety.

Can I leave Dedko without feed?

Dedko will be fine without feed for about 20 days. It is better to turn off the electrical supply if you will be leaving Dedko unfed for more than 2-3 days.

When you return, turn on the electrical supply and wait for 6 hours before feeding Dedko. Gradually ramp up feed over 4 days as was done during start-up. It will be typically 2 – 3 days before you start seeing any gas being generated. Be patient.

Will the balloon burst?

Not under normal operation. It will melt if exposed to a hot iron, burning matchstick, etc.

Can Dedko be installed out doors?

Yes. Dedko will be fine outdoors under a roof.

What about cleaning?

Wiping with a damp rag is normally sufficient. Use water and mild soap if desired.