



## INFORMATION LEAFLET

### HANDIGAS IDENTIFICATION

#### What is Handigas?

Handigas is the Afrox brand name for liquified petroleum gas (LPG). It is a product of the oil refining process and is the cleanest burning of domestic fuels such as paraffin, diesel and petrol.

#### Odour

LPG has no odour. However for safety reasons we have added ethyl mercaptan to give it a 'garlic' smell.

### Cylinders

Handigas cylinders are low pressure welded cylinders. They are grey in colour and come in 4 different sizes:

- 6kg – for home use
- 9kg – for home and industrial use
- 14kg – for home and industrial use
- 48kg – for industrial and hospitality use

### Cylinder filling

Handigas is stored as a liquid under pressure (5bar @ 20°C) in steel cylinders. Cylinders are filled by mass, which means that each cylinder is filled by weight of product. This is approximately 80% of the volume of the cylinder. The additional 20% of volume is left to allow for expansion of the gas under increased temperature, for example if the cylinder is left in the sun. Liquid Handigas expands 10 times more than water.

### Cylinder valves

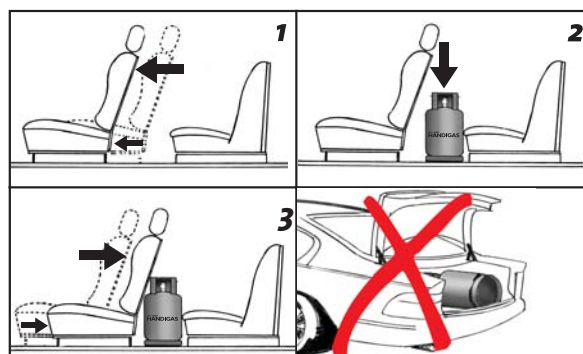
The Handigas valve has a flat seat, which means that two half -turns will open the valve fully. Any more turns will make it difficult to close quickly in an emergency.

### TRANSPORTING HANDIGAS

Handigas is stored in liquid form in the cylinder. If there is a leak, the liquid turns to gas, expands 275 times and sinks to the lowest point because it is heavier than air.

When transporting Handigas the cylinders should always be kept upright and be secured, preferably behind the passenger seat. This prevents liquid escaping from the cylinder in the event of a leak.

In the event of a leak you will smell the gas and must evacuate the vehicle and ventilate it immediately.



### STORING HANDIGAS

#### At home

Handigas cylinders should always be stored upright and secured. Make sure that the area is well ventilated and covered from the elements. DO NOT store your Handigas cylinder in a basement or sealed room.

#### At work

Handigas cylinders are stored in specially constructed cages. Make sure that all the appropriate safety signs are displayed and that the cage is always locked. Make sure that the Handigas cylinders are stored upright and secured.

### USING HANDIGAS

#### Receiving cylinders

On receipt of a Handigas cylinder you must perform the following checks:

- Check to see that the valves are sealed with an AFROX shrink wrap seal.
- IF THE AFROX SEAL IS MISSING OR DAMAGED DO NOT ACCEPT THE CYLINDER.
- Check that the valve on the cylinder is tightly closed.
- Check that the cylinder is in good condition. (no dents or rust)

If the cylinder is faulty then return it to AFROX or your closest Handigas supplier.

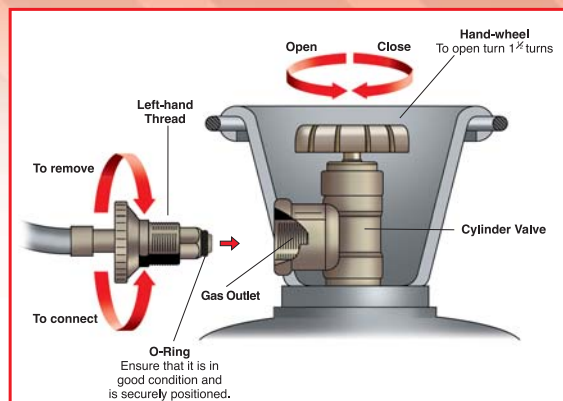
### Moving cylinders

To transport large cylinders either use a cylinder trolley or 'churn' the cylinder. This is done by tilting the cylinder by 20° and using the valve guard to turn the cylinder.

- NEVER roll or drag cylinders.
- NEVER use the valve to move the cylinder.

### Connecting cylinders

Secure the cylinder next to the appliance or connection point in an upright position. Remove the AFROX seal. Check that the washer in the bullnose connection is in place and in good condition. Neoprene or fibre seals do wear and need replacing from time to time. Connect the bullnose connection to the valve and be careful not to over tighten. Use the correct tools.



### Opening cylinders

Open the cylinder valve two half-turns. In the event of a leak close the valve and check the washer before reconnecting.

### Checking for leaks

Handigas is not poisonous but does displace oxygen and is therefore an asphyxiant. If you smell gas immediately close the cylinder valve. Use a soapy water solution (dish washing liquid & sponge or brush) to check the valve. The solution will bubble around the leak. Immediately disconnect the cylinder and move it outside. Open the doors and windows to ventilate the room. Once the cylinder has vented return it to your Handigas supplier.

If there is no leak at the cylinder valve, open the valve and check the appliance connections with a soapy solution.

NEVER USE A NAKED FLAME TO CHECK FOR LEAKS.

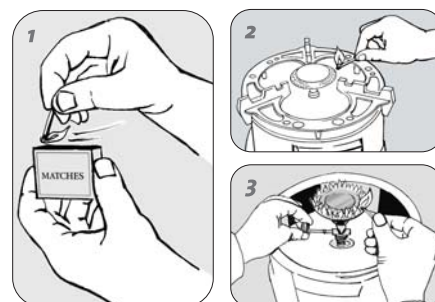


### Lighting the flame

In appliances that do not have auto ignition follow these steps:

- Light the match or lighter.
- Hold the flame to the gas burner.
- Open the gas.

The gas will light immediately. Adjust the gas as required to give a blue flame with orange tip. Make sure that there is always an open window when using gas appliances even in cold weather. Always close the cylinder valve when not in use.



### The perfect flame

The recommended gas mixture when burning Handigas is approximately 1 part Handigas to 26 parts air. To maximise the heat in the flame (1970°C) the setting needs to be correct. If the flame is:

- Blue with a small yellow tip, the setting is perfect.
- Blue only, shows too much air.
- Yellow or orange, shows too little air. This could also mean that the air intake is dirty and may need cleaning.



### Changing cylinders

TREAT ALL YOUR CYLINDERS AS IF THEY WERE FULL.

Close the cylinder valve. Remove the regulator by turning it in a clockwise direction. It has a reverse thread because of being a fuel gas. Replace the empty cylinder with a full one. Connect the full cylinder as discussed above.