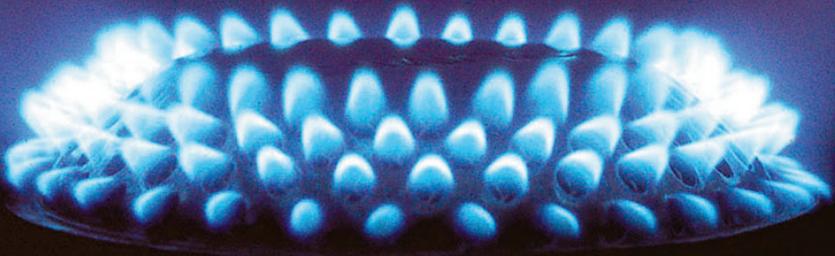


Handigas

A Guide to LPG



What is Handigas (LPG)?

Handigas is the brand name for the Liquefied Petroleum Gas (LPG) sold by Afrox, which, like other petroleum fuels such as petrol, diesel and paraffin, is refined by the major oil refineries and is the cleanest burning of all these liquid fuels. Afrox's extensive network contributes to the wide availability of Handigas, making it a convenient source of LPG.

Handigas is ideal for cooking, heating, hot water, braaing, camping and hiking.

Always purchase Handigas from an authorised Afrox dealer

Only authorised Afrox Handigas dealers may fill Afrox owned LPG cylinders, which carry the brand name Handigas. The Afrox **red seal** guarantee assures that:

- ⚠ All the safety checks have been carried out at each fill
- ⚠ The cylinder has been correctly filled to the right quantity of gas you have purchased
- ⚠ The quality of the cylinder or the gas can be guaranteed
- ⚠ You will get Afrox service back-up if the cylinder or gas is faulty.



Beware of rogue fillers

Rogue fillers are threatening public safety and placing lives at risk by illegally filling Afrox Handigas cylinders and misleading consumers into believing they are buying a legitimate Afrox product. Beware of unethical operators who are not interested in safety and disregard or have no knowledge of legislation and best practices. Do not be misled by what may appear to be a legitimate business selling Afrox Handigas – if it is not an Afrox Gas & Gear or an accredited Afrox Handigas distributor, then the cylinders are illegally filled (SANS 10019:2011). If you are sold Afrox Handigas without the uniquely serial numbered Afrox **Red Seal** shrink-wrapped over the cylinder valve, you are buying a potentially hazardous product.

Illegal filling, including transfilling, compromises safety and can result in damage, injury, and even loss of life. If you come across any illegal filling, please help and report it anonymously to the Liquefied Petroleum Gas Association of South Africa (LPGASA) who will investigate and take the appropriate actions. For more information, visit www.lpgas.co.za.



Illegally filled cylinders could place potential insurance claims at risk



Checking the condition of the gas cylinder

The condition of all Handigas cylinders is carefully checked before and after each cylinder is filled. Checks are also done to detect any possible leaks before the cylinder is sealed and transported to the market. When purchasing a full cylinder of gas, always check that:

- ⚠ The stockist is an authorised Handigas dealer
- ⚠ The cylinder has the Afrox **red** seal guarantee
- ⚠ The cylinder valve is tightly closed and the Afrox **red** seal is not broken
- ⚠ The cylinder is in good condition and is not badly dented, rusted or damaged in any way
- ⚠ If the cylinder is in some way faulty, ask for another cylinder and request that the faulty one is returned to Afrox.

Should you have a problem with a purchased Handigas cylinder, you can use the unique seal number on the red Afrox seal when bringing the matter to the attention of your Handigas dealer or the Afrox Sales Centre.

Correct filling of LPG cylinders

Handigas is stored as a liquid under pressure in specifically manufactured gas cylinders. The cylinder is never filled all the way to the top because the gas is in a liquid form and like water, gas expands when it is hot and contracts when it is cold; this expansion is ten times that of water. When correctly filled, the cylinder is filled to 80% of its volume capacity to ensure the safety of the gas cylinder and to allow the liquid gas to expand and contract with the temperature change.

Handigas cylinders are always filled to the correct mass (weight of the gas you buy), i.e., 9 kg in the 9 kg cylinders, 19 kg in the 19 kg cylinders, etc.



Decanting LPG is dangerous and can lead to injury

Illegal filling, including transfilling, compromises safety and can result in damage, injury, and even loss of life. If you come across any illegal filling, please help and report it anonymously to Liquefied Petroleum Gas Association of South Africa (LPGASA) who will investigate and take the appropriate actions.

Consequences of purchasing illegally filled cylinders from these vendors include:

- ⚠ Whilst conducting the illegal filling there may be spillage of liquid LPG in the premises, which is extremely dangerous. As the liquid gas vapourises, it expands over 250 times, resulting in a dangerous fire hazard
- ⚠ The cylinder may be overfilled, which, if it is a hot day, may result in the cylinder rupturing as there is no space for the vapour in the cylinder to expand
- ⚠ The cylinder may be underfilled, which is the most common problem. Although not dangerous, it does mean that you are being charged for gas that you were never supplied.

Beware of unethical operators who are not interested in safety and disregard or have no knowledge of legislation and best practices. Illegal filling compromises safety and can cause damage, injury or loss of lives.



Transporting, storing and using gas

When transporting, storing and using gas, it is important to remember that LPG is in a liquid form in the cylinder, and that gas is heavier than air. Gas cylinders should therefore always be transported, stored and used in the upright position on a firm surface. If gas leaks from a cylinder that is lying down, the cylinder will leak 275 times more gas. If the gas cylinder cannot stand up securely, for example, in the boot of your car, always transport your cylinder inside your car, behind the passenger seat, pushed up tightly against the back seat to prevent the cylinder from falling over while you are driving. Do not transport gas cylinders in your car over long distances.



As LPG is heavier than air, any accidental release of gas will sink to the lowest point. Therefore, cylinders should always be **kept away from**:

- ▲ Drains and confined areas
- ▲ Any source of ignition
- ▲ Any hot surface or fireplaces where the cylinder would be exposed to very high temperatures.

Do not leave gas cylinders in your car for an extended period, particularly when it is very hot.



Connecting your gas cylinder to an appliance

When connecting your gas appliance to the gas cylinder, always ensure that the connection is made correctly and is gas tight. A smell of gas will be detected if the connection is not tight. All gas appliances have rubber or fibre washers to seal the gas tightly at the point of connection to the gas cylinder. Always check that this washer or seal is in place and in good condition. The rubber or fibre seals and hoses do wear and need to be checked periodically and replaced occasionally.

Some 'Handi' tips:

- ▲ Only open valve 1½ turns
- ▲ When lighting gas appliances that don't have auto ignition: first light the match or lighter, hold it to the gas



burner, then open the gas. The gas will ignite immediately and the flame temperature will go from 0 to 1 970°C instantly

- ⚠ To ensure that fresh air is always available, have a window slightly open when using gas appliances, even in cold weather
- ⚠ Ensure LPG cylinders are always placed on a firm surface
- ⚠ Always shut off the gas supply at the cylinder valve when the appliance is not in use
- ⚠ It is very important to keep the gas jets clean. Before connecting the appliance to the gas cylinder, make sure that the valve is free of dirt and dust.

Like all electrical installations, it is legally required that fixed LPG appliances are fitted and piped to a gas cylinder(s) outside, and they must be installed by a certified LPG installer. Contact your Handigas dealer or **Afrox Customer Service Centre on 0860 020202 or +27 11 821 3000 if calling from outside of South Africa.**

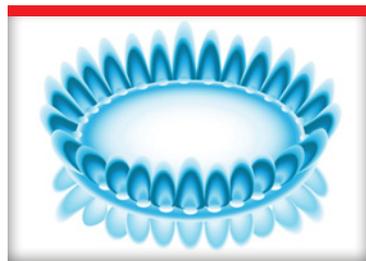


Equipment checklist

- ⚠ Always read and understand the appliance manufacturer's instruction booklet
- ⚠ Ensure that the appliance you purchase conforms to the SANS:2012 Standard and that it carries the LPGSASA Safe Appliance mark
- ⚠ The LPG hose is neoprene rubber and must be SABS approved. The correct size of the hose is 8 mm to fit the gas connection of the appliance. The hose must always be in good condition, never perished or split, kinked or tightly coiled
- ⚠ The correct size Jubilee clamps or 'O' clips must be used and not be over tightened
- ⚠ Gas jets, which have tiny holes, are used to control the gas flow to the burner or heater and are sized specifically for each individual appliance. Gas jets can get dirty or blocked and will affect performance of the appliance. If this occurs, the jet(s) must be replaced.



When Handigas burns correctly, the flame is a blue colour with a yellow/orange tip. A poor flame would be very yellow in colour, 'lazy' and sometimes even give off a sooty smoke, indicating that the gas flow is incorrect, or that the appliance is faulty. Check the appliance by following instructions supplied to correct the problem. Sometimes a blocked jet may need to be replaced. Trying to unblock a gas jet is not advisable as the hole in the jet is very small and any damage to the hole will change the flow of gas. A new jet is always advised.



Leak test

While Handigas is not poisonous, if there is a leak, it displaces the air we breathe. If there is a smell of gas, it is important to rectify the situation immediately:

- ⚠ Shut off the gas at the cylinder valve, then move the cylinder outdoors and open all doors and windows to ventilate the room until there is no more smell of gas
- ⚠ Do a visual inspection to see if all connections are secure and the hose is not damaged
- ⚠ Turn gas on without igniting
- ⚠ Using an Afrox leaktest solution or soapy water solution (dishwashing liquid and a sponge or brush), check the cylinder valve and regulator
- ⚠ The soapy solution will bubble if gas is leaking. Check all the gas connections on the appliance and hose and try to isolate any leaks
- ⚠ Should the leak persist, take the gas appliance to your Handigas dealer, or contact the **Afrox Customer Service Centre on 0860 020202** for assistance.



If transporting a leaking cylinder

- ⚠ Note: LPG is a flammable gas, therefore empty the leaking cylinder outside in a well ventilated area, away from flames and ignition sources
- ⚠ Transport the empty cylinder in a well ventilated vehicle to Afrox for inspection.



NATIONAL CUSTOMER SERVICE CENTRE

Tel: 0860 020202 / +27 11 821 3000 (if calling
from outside of South Africa)

E-mail: customer.service@afrox.linde.com

Shop online at www.afroxshop.co.za

www.afrox.co.za

