

## Know More about Gas Safety

# General Household Gas Safety



愛GAG氏家庭

機電工程署  
**EMSD**

Updated March 2016

### Household Gaseous Fuels

The most common household gaseous fuels are town gas and liquefied petroleum gas (LPG). Town gas, whose main constituent is hydrogen, is lighter than air and is transmitted to households via pipes. LPG, a mixture of propane and butane, is heavier than air and is usually pressurized and stored in liquid form in cylinders. There are also central LPG supply systems whereby LPG is delivered to households via pipes.

Both town gas and LPG are safe and reliable gaseous fuels, but inappropriate use of them may cause serious gas accidents. This leaflet covers the important aspects of household gas safety which the domestic consumers should know when using town gas or LPG.

### Emergency Handling of Gas Leaks

Pungent odorants are added to town gas and LPG, so that gas leaks can be detected easily. When consumers detect gas leaks, if possible, they should stop the gas flow immediately by turning off the emergency control valves upstream of the gas meters (the main switches of the gas meters). For LPG cylinders, the consumers can disconnect the regulators of the LPG cylinders to cut gas supply.

Extinguish all naked flames and open all windows and doors wide to disperse the gas. Do not use the telephone or operate any electrical switches. Do not touch the switches of any gas appliances. If the gas leak is serious, leave the premises at once and notify your neighbours to evacuate, but do not press any doorbells. Leave the building by the stairs. Dial 999 and notify the Fire Services Department, which will send emergency personnel to the scene.



### Safe Use of Gas Appliances

#### General Safety Guidelines

All domestic gas appliances legally sold in Hong Kong bear the GU Mark, signifying that such models are produced in accordance with recognised international safety standards and have passed the local quality assurance audits. So the public should purchase gas appliances bearing the GU Mark to ensure safety in using them. According to the Gas Safety Ordinance (Cap. 51), the installation, replacement and maintenance of gas appliances must be carried out by registered gas installers employed by registered gas contractors. It is against the law to bring non-approved gas appliances into Hong Kong or for consumers to install gas appliances themselves.



For safety reasons and for the effective performance of the gas appliances, consumers should follow the instructions of the manufacturers when using the appliances.



#### Safe Use of Gas Cookers

When gas cookers are used, windows must be opened or exhaust fans must be switched on to maintain good ventilation and to supply adequate air for combustion. However, the gas cookers should not be located beside windows to avoid the flames being blown out by strong wind. Gas cookers must be under supervision when in use. Do not leave them unattended when they are operating. Flammable objects must not be placed beside gas cookers. Parents should also educate their children not to play with gas cookers to avoid fire.

The length of the flexible gas tubing connected to the gas cooker must be as short as possible and must not exceed 2 metres. The flexible gas tubing must be replaced prior to the expiry date of its service life. All flexible gas tubing for low pressure applications (gas pressure of not more than 7.5 kilopascals) supplied to

and sold in Hong Kong must be approved by the EMSD. The public should use approved flexible gas tubing imprinted with the wording "EMSD APPROVAL GTXXXX" (XXXX means the approval number) and the expiry date of service life.

#### Safe Use of Gas Water Heaters

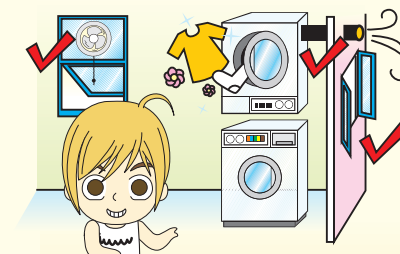
There are several types of gas water heater. Room-sealed gas water heaters, available in different models such as fanned draught and natural draught ones, are the best choice for new and replacement installations. The air intake and flue terminal of this type of heater are outside the external wall, so fresh air for combustion is taken from and combustion products are discharged to outside air, and the heater does not consume or contaminate the air in the room. Most apartments are provided with suitable flue apertures for the installation of room-sealed gas water heaters to serve bathrooms.

If you are still using other types of gas water heaters, we recommend that you replace them with room-sealed ones during regular gas safety checks to protect yourself and your family.

#### Safe Use of Gas Laundry Dryers

Customers must install gas dryers according to the technical guidelines of manufacturers. In general, the exhaust outlet of a gas dryer must be free of obstacles and the exhaust gas must be exhausted to outside air directly. Exhaust ducts should be made of strong galvanized steel sheets and should be as short as possible. The number of bends and the duct length should be kept to a minimum so that the venting of the exhaust gas will not be hindered.

When gas dryers are used, windows must be opened or exhaust fans must be switched on to maintain good ventilation. Do not put too much clothing or dripping clothes into your dryers to avoid overloading.

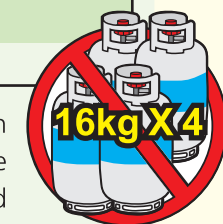


The drying time should not be too long. Flammable clothing (such as thin underwear or clothing made of synthetic fibres) should not be dried by gas dryer to avoid the combustion of clothing which may lead to a fire. Odds and sods should not be placed near gas dryers. Filters should be cleaned frequently to avoid the accumulation of dust, which may hinder the performance of gas dryers.

### Storage of LPG Cylinders

According to the Gas Safety Ordinance (Cap. 51), unless specifically approved by the Gas Authority, storing LPG cylinders (including empty cylinders) with a total nominal water capacity of over 130 litres (about 50 kg) is prohibited. The weight of LPG cylinders commonly used in households range from 12 kg to 16kg. For general reference, the following table lists out the maximum number of cylinders permitted for some common sizes of LPG cylinders.

LPG Weight (kg)	Permitted Number of Cylinders
12-13.5	4
15-16	3



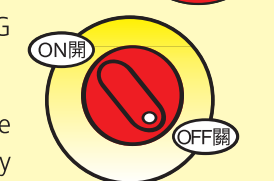
LPG cylinders should be stored upright in a well-ventilated and readily accessible location and kept away from heat and flames, especially when you are exchanging cylinders. As LPG is heavier than air, to avoid accumulation of gas, do not use or keep LPG cylinders below ground level, adjacent to drains or in basements.

Moreover, for public safety, do not put LPG cylinders in public places.



### Steps to Exchange LPG Cylinders

1. Extinguish all nearby flames, and do not smoke.
2. Switch off gas appliances.
3. Switch off and disconnect the pressure regulator. Then replace the used LPG cylinder.
4. Re-connect the pressure regulator carefully and firmly and check whether there is smell/sound of gas leaking from the cylinder connection.
5. Switch on the pressure regulator, and check your gas appliances for proper operation.



### Make Use of the Services Provided by Approved LPG Distributors

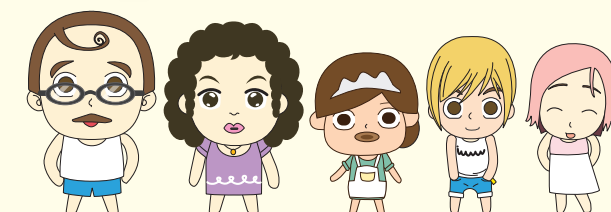
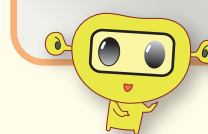
LPG cylinders should be purchased from approved LPG distributors. All LPG distributors are subject to the monitoring of registered gas supply companies. Approved LPG distributors would employ registered gas installers to provide services for customers to ensure the safety in using LPG cylinders. An approved LPG distributor would display the certificate issued by the respective registered gas supply company in the shop and would also show the registered gas contractor number on the invoice

for identification. Members of the public may browse the register of approved distributors on the EMSD homepage.

### Enquiry

For further details on gas installations, please contact your registered gas contractor, call the Government hotline 1823 or visit the EMSD homepage at

<http://www.emsd.gov.hk>



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