

SHROPSHIRE FIRE AND RESCUE SERVICE

FIRE SAFETY ADVICE SHEET

LIQUIFIED PETROLEUM GAS (LPG) HEATERS

A GUIDE TO SAFE USE AND HANDLING OF LPG HEATERS

INTRODUCTION

These heaters are a safe and economical source of winter warmth if looked after properly, serviced and used in accordance with the manufacturers instructions. They should comply with BS EN 449 and carry a CE certification mark. (Appliances prior to 1992 will comply with the requirements of BS 5258 Pt: 10 & 11 and carry a BSI kite mark)

Portable heaters do not need flues but they do need a lot of air. They should not be used in confined spaces. All new heaters complying with BS EN 449 are fitted with a special safety device that cuts off the gas supply if the room gets too stuffy. Heaters designed for external use have no such device and should not be used in confined spaces.

Many accidents caused by faulty gas appliances involve those which may have been purchased second hand. Special care is needed when buying a second hand portable heater. Have it checked by a qualified engineer to ensure it is operating properly and that all safety devices are functioning correctly. If you have any doubts, do not buy.

SITING AND USE

- Keep heaters clear of walls, furniture, bedclothes and curtains. Heaters should always face towards the centre of the room
- Do not use heaters for drying or warming clothes
- Heaters should not have anything placed on top of them
- Heaters should be regularly serviced by a competent person to the manufacturer's instructions to ensure that they are working properly.
- Heaters should not be exposed to draughts, be placed where they might be knocked or tripped over, or where objects may fall on them.
- Do not attempt to move heaters whilst they are lit

- Although fitted with flame guards, contact with these can still cause serious burns. Suitable fire guards should be provided to give additional protection, especially where children and the elderly are likely to be present.
- Heaters should not be used in garages where petrol vapour may be present or where highly flammable materials are stored. Heaters should be carefully examined prior to use following prolonged periods of storage.

VENTILATION

It is essential that adequate ventilation is provided and maintained in rooms where heaters are used to ensure the heater is receiving an adequate supply of fresh air. Most rooms have fresh air entering around the doors and windows, however, if the room becomes stuffy open a window or door immediately.

SAFE HANDLING AND USE OF L.P. GAS

LP Gas is a colourless liquid which readily evaporates into gas. It is odourless, although it will normally have an odour added to help detect leaks. It can burn or explode when it is mixed with air and meets an ignition source. It is heavier than air and tends to sink towards the ground. It can flow long distances along the ground and can collect in drains, gullies and cellars.

The safe handling and use of LP Gas cylinders is essential as a common cause of damage and potential danger arises from mishandling. Any guidance given by the manufacturer/supplier at the time of purchase should be strictly complied with. In addition, the following advice should be adhered to:-

- Cylinders damaged in any way should be returned to the supplier as soon as possible.
- Cylinders should be changed in the open air.

When changing gas cylinders:-

- Check that the replacement cylinder is the correct type for the appliance
- Extinguish/remove any naked flames or other ignition sources
- Ensure the valve on the empty cylinder is closed before disconnecting the heater
- Do not open the valve on the replacement cylinder until the connection to the heater is secure
- Look for any gas leaks. Suspected leaks can usually be detected by smell or by 'frosting' at the point of escape. If in doubt, check by applying a soapy water solution around all the suspect joint, fittings and pipework.

Do not test for leaks using a naked flame. If the leakage cannot be stopped, leave the cylinder in the open air in a safe place remote from any drains or potential ignition sources, taking care to keep the point of leakage uppermost

- Store any spare cylinders upright and outside where possible. Never store them in basements, near drains, under stairs or in cupboards containing electrical equipment

CARBON MONOXIDE

Carbon Monoxide (CO) is a highly poisonous gas which can be produced if heaters are not working correctly. It is difficult to recognise as it has no smell, colour or taste. Symptoms of CO poisoning are similar to that of a viral infection. It affects a person's mental ability causing them to become incapable without knowing and prolonged exposure can lead to brain damage or death.

Symptoms of Carbon Monoxide Poisoning

Low levels of carbon monoxide poisoning can be confused with flu symptoms, food poisoning or other illnesses and can have a long term health risk if left unattended. Some of the symptoms are the following.

- Shortness of breath
- Mild nausea
- Mild headaches

Moderate levels of CO exposure can cause death if the following symptoms persist for a long measure of time.

- Headaches
- Dizziness
- Nausea
- Light-headedness

High levels of CO can be fatal causing death within minutes.

If your LP Gas heater has any of the following, it could be producing Carbon Monoxide. If so, switch it off and do not use it again until it has been checked by a qualified engineer.

- Burner panels which are dull and burn with a blue haze
- Soot deposits on the burner panels
- Burner panels or cement fixings are damaged
- The heater does not burn quietly

ACTION FOR AN EMERGENCY WITHIN PREMISES

Gas leakage without fire

- I. Shut off gas supply
- II. Extinguish all ignition sources
- III. Thoroughly ventilate the area by fully opening all doors and windows
- IV. Evacuate the premises to a safe distance
- V. Call the Fire & Rescue Service and state 'LP Gas leak within building'

If the leakage persists, the cylinder/appliance should immediately be removed to open air to a safe place remote from any drains or ignition sources, keeping the point of leakage uppermost.

If it is not possible to remove the cylinder/appliance to open air, carry out procedure in i-v above.

Gas leakage with ignition

- I. Shut off gas supply
- II. Evacuate the building
- III. Call the Fire & Rescue Service and state 'Fire involving LP gas cylinder'

Other fires where cylinders may become involved

Providing it can be done quickly and safely, the cylinder/appliance should be removed from the property in which a normal outbreak of fire has occurred. If it is not safe to do so, inform the Fire & Rescue Service of the possible involvement of cylinders in the fire.

Further information and advice can be obtained from The LP Gas Association at www.lpga.co.uk

Or for general fire safety matters, Shropshire Fire and Rescue Service can be reached on **01743 260260** or via our web site at **www.shropshirefire.gov.uk**