

SAFE USE OF LPG IN CYLINDERS

Introduction

This guidance is aimed at small-scale users of LPG in cylinders. It does not apply to LPG from bulk tanks. It is not a definitive guide to the law, but contains notes on good practice which you may find helpful in deciding what you need to do.

For the purposes of this sheet the term "cylinders" includes disposable cartridges.

Hazards

LPG (propane or butane) is a colourless liquid which readily evaporates into a gas. It has no smell, although it will normally have an odour added to help detect leaks. It can burn or explode when it is mixed with air and it meets a source of ignition. It is heavier than air, so it tends to sink towards the ground. It can flow for long distances along the ground, and can collect in drains, gullies and cellars.

LPG is supplied in pressurised cylinders to keep it liquefied. The cylinders are strong and not easily damaged, although the valve at the top can be vulnerable to impact. Leaks can occur from valves and pipe connections, most likely as a gas. LPG liquid can cause cold burns to the skin.

Precautions

a) Fixed cylinder installations

If you have one or more cylinders fixed in position for connection to an appliance, the installer must ensure that they are located in a safe place and have all the necessary safety devices to protect the hoses, pipework and appliances attached to them. However you need to look after the installation. In particular you should:

- ensure the cylinders are kept secured in position and are not tampered with.
- if you have a maintenance contract (with the LPG supplier or other reputable company) make sure they come at the specified intervals, and that any work required is done. If the equipment is leased, make sure the owner keeps to the lease terms regarding maintenance. Keep all the paperwork relating to the installation for reference.
- don't let anyone work on the installation unless they are suitably trained and competent to do the work.
- read the operating instructions, and the emergency actions, and ensure that everyone who needs to know them and follows them carefully.
- don't do any modifications which may affect the safety of the installation, such as altering fire walls, or erecting sheds or fences or installing electrical equipment near the cylinders. If in doubt, ask your LPG supplier for advice.
- make sure that "No Smoking" signs and any other safety notices are maintained.

b) Cylinders not fixed in position

- keep all cylinders in a safe, well-ventilated place, preferably in the open air, and away from occupied buildings, boundaries and sources of ignition and of heat. Make sure the cylinders are properly secured and are kept upright.

c) In all cases:

- keep rubbish and anything combustible well away, and keep weeds and grass in the vicinity cut down. Don't use chlorate-based weedkiller, as it can be a fire hazard.
- don't let anyone have any electrical equipment, vehicles, bonfires, barbecues or other sources of ignition near the cylinders. Exceptions are items purpose-designed to use LPG, such as gas-fired barbecues. Do not smoke when changing cylinders.
- keep people not involved with the installation well away from it, particularly children.
- keep vehicles well away from the installation.
- make sure that the pipework or flexible hose from the cylinders to the point of use is protected against accidental damage and is properly supported. For underground piping, make sure you know the route it takes, and avoid putting anything in the ground which may damage the pipework.
- report any equipment failure or damage to your supplier without delay, and ask them for advice about what you should do.



Deliveries

If you have cylinders delivered, make sure you order the right number and type of replacements. Don't order more than you need, as you may not have space to keep them safely.

On the delivery day, make sure the parking area is clear for the delivery vehicle.

Keep away from the vehicle while the cylinders are being handled.