



# Liquified petroleum gas (LPG)

LPG (normally sold as butane or propane) is supplied as a liquid under pressure and then vapourised to be used as a fuel. The main dangers associated with LPG are leakage (as a gas it will sink to the lowest possible level) followed by ignition (when mixed with air it is highly flammable and potentially explosive). Simple but effective safety steps are given below which can help prevent serious accidents, and you may find them useful as a safety checklist.

Note: The safety precautions needed for LPG vary depending on the amount being stored and the containers used (for example, cylinders, cartridges or bulk tanks). You should get advice on all aspects of positioning, storage and use from your LPG supplier and your local enforcement authority.

**Step 1** Store all cylinders (full or empty) outside in a secure well-ventilated compound. Do not store them below ground level, or next to openings into buildings or drains. Compound gates should open outwards.

**Step 2** Keep storage areas clear of materials that can catch fire easily and sources of ignition (for example matches), and clearly mark them with warning, no-smoking and fire procedure signs.



**Step 3** If there is a fire or a leak, dial 999 to call the fire brigade. Get everyone out of the premises and if you have a fire alarm, activate it. An overheated cylinder can explode.

**Step 4** Store cylinders in a secure and upright position. Do not stack them above 2.5metres high and leave enough space for access, removing them and fire fighting.

**Step 5** All work on gas appliances must be carried out by Gas Safe registered installers. Make sure anyone you employ to install or work on your gas system is Gas Safe registered and holds a valid certificate of competence for each work activity. Phone Gas Safe Register on 0800 408 5500.

**Step 6** In rooms where LPG appliances are used, make sure there is plenty of ventilation and provide a readily accessible isolation point to switch off the supply quickly in case there is an emergency.

**Step 7** Have all appliances and flues regularly checked and maintained. Look for damage to pipework and flexible hoses. Report any equipment failure or damage to your supplier immediately.

**Step 8** Turn off cylinder valves at the end of each working day, and change cylinders away from sources of ignition in a well-ventilated place (preferably outside).

## Case Study

A catering employee suffered flash burns to his face and arms when he investigated a gas leak in a faulty cooker. The cooker was a second-hand appliance and although the oven section was not being used, gas was leaking from a faulty valve. The employee was testing for the gas leak using a lighter when it ignited and he was engulfed in flames.