



LEAFLET 13

MEDICAL GASES - MEDICAL OXYGEN IN A VEHICLE

The purpose of this leaflet is to highlight key safety information for patients and drivers where medical oxygen cylinders or medical liquid oxygen equipment is used and / or transported for personal use in a vehicle. It is perfectly safe to both carry and use medical oxygen in a vehicle providing you follow the rules set out below. It is recommended that oxygen equipment is not left in an unattended vehicle.

Planning your journey

When planning your trip, ensure you have sufficient oxygen. Consider whether you may need additional oxygen in case you want to stay out a little longer or are held up in traffic. Alternatively, reduce the amount of oxygen carried by arranging to have supplies available at your destination. Have you got sufficient oxygen? If in doubt talk to your gas supplier.

Oxygen

Oxygen is necessary for anything to burn. If the amount of oxygen in the air is increased objects burn more readily and more fiercely. In confined spaces, such as a poorly ventilated vehicle, if your clothing, the seats or the carpets become enriched with oxygen, they will catch fire more easily. It only needs an ignition source, such as someone smoking or an electrical fault, to start a fire. If you or your passenger(s) need to use medical oxygen, take care not to allow oxygen levels to rise.

Avoid the risk of fire

Smoking and sources of ignition

Do not smoke, use electronic cigarettes or other portable electronic devices, in a vehicle when carrying or using oxygen. This includes everybody - not just the user or the driver. Do not charge electronic devices in the vehicle.



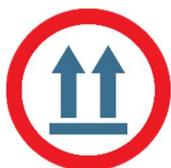
Ventilation

Make sure you have good ventilation to avoid creating an oxygen-enriched environment. The best way to improve ventilation is to open a window.



Liquid oxygen

Take extra care with liquid oxygen containers. They continually vent cold oxygen gas (even when not in use) and could leak liquid if not kept upright. Secure the container upright and open windows to stop the oxygen building up.



Refuelling the vehicle

Avoid using oxygen while your vehicle is being refuelled. Close the cylinder valve before refuelling and close any windows near the refuelling point. Do not connect / disconnect electric vehicles for recharging when using oxygen.



Keep your cylinders secure

Cylinder restraint

Ensure cylinders that are in use are securely stowed and located within easy reach of the user. If provided, use a carrying bag or box to assist in securing the cylinder. If involved in an accident you could be injured by unsecured items being thrown around inside the vehicle.



Cylinder security

If it is necessary to leave oxygen equipment in an unattended vehicle, position out of sight, away from direct sunlight in a ventilated area. There have been many cases where opportunist thieves have stolen cylinders and oxygen equipment.





Turn it off when not in use
Keep the valves closed on any cylinder not in use.



Cylinder storage
Cylinders that are not in use should be secured in the luggage area with their valves closed.

Driver and vehicle owner responsibilities

Legal requirements

It is the driver's responsibility to ensure the vehicle is safe. The driver shall ensure that any oxygen equipment is carried safely even if the driver is not the user or the patient's carer.



Documents

The driver does not need to carry any special documents to transport medical oxygen. However, it is useful to have the right information to assist the emergency services in the event of an incident. Refer to 'Helping the emergency services'.



Signs on your vehicle

As you are only carrying small quantities of medical oxygen, you are not required to display any hazard warning labels or signs on your vehicles.



Insurance of your vehicle

Make sure you have informed your insurance company that you are carrying medical oxygen in your vehicle.

To prevent inadvertent actions being taken, the Emergency Services have indicated they would prefer patients not to display hazard diamond labels or other signs which indicate that you may have medical gases in your vehicle. It is illegal to display hazard diamond labels if you are not carrying medical gases in the vehicle.

Suspected medical oxygen container leaks

If you suspect that there is a leak from your medical oxygen cylinder, take the following immediate actions:

- Close the cylinder valve (if safe to do so) and increase the ventilation in the vehicle.
- If you have a liquid leak. Do not touch the liquid it will give you cold burns.
- If the leak continues, park the vehicle in a safe location, away from naked flames and flammable substances. Do not smoke or allow anybody to smoke within 3 metres of the vehicle.
- Remove the leaking cylinder from the vehicle and place in a safe, well-ventilated area.
- If you cannot stop the leak, wait until the gas has vented and the cylinder is empty before collecting the cylinder. Do not return a leaking cylinder into the vehicle.
- Ensure that the vehicle has been adequately ventilated before re-entering the vehicle.

If additional help is required, contact your medical oxygen supplier for advice.

Helping the emergency services

The emergency services attending an accident or incident should be advised that the vehicle is carrying medical oxygen.

They will want to know whether you are carrying cylinders, liquid oxygen or both, how many cylinders and/or liquid oxygen containers are in the vehicle as well as their size and location.

For information, the UN classification (which includes ADR) for these products are:

- Medical oxygen in cylinders, UN 1072, OXYGEN COMPRESSED.
- Medical liquid oxygen, UN 1073, OXYGEN, REFRIGERATED LIQUID.

Class 2.2 non-toxic, non-flammable compressed gas; Class 5.1 oxidising agent.



© BCGA retains the intellectual property rights (copyright) on all its publications. All rights reserved. No part of our publications may be reproduced without the express permission of BCGA. If you have any queries contact BCGA.