

# DfT dangerous goods guidance note 9

## Carriage of Oxygen Cylinders by Road

*NOTE: This guidance note is only intended to answer whether the transport of UN1072 Oxygen Compressed cylinders by road falls within the scope of the Regulations. It should therefore not be interpreted as a substitute for the Regulations.*

1. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004 (the Carriage Regulations) implement ADR (the European Agreement concerning the International Carriage of Dangerous Goods by Road) in Great Britain. They came into force on 10 May 2004. There are similar requirements in Northern Ireland.
2. This guidance note covers two main issues:
  - **Commercial Transport of Oxygen Cylinders, and**
  - **Private Carriage of Oxygen Cylinders**

## Commercial Transport of Oxygen Cylinders

### How much oxygen can I transport commercially in cylinders, before the Regulations apply?

3. If you carry oxygen cylinders (other than for private purposes) the regulations will apply to some extent. UN1072 Oxygen Compressed is assigned to Transport Category 3, which permits carriage of up to 1,000 litres (measured by the water capacity of the cylinders) with very limited application of ADR.
4. For such limited loads the main requirements are as follows
  - Carry 2 kg dry powder fire extinguisher or equivalent
  - Driver to receive general training and a record to be kept (details in ADR chapter 1.3)
  - Stow cylinders properly (ADR 7.5.7)
  - Carry in open or ventilated vehicle if feasible. If not, mark the vehicle cargo compartment doors "Warning No Ventilation Open with caution". This is new for ADR 2005 (chapter 7.5.11 additional provision CV 36)
  - Basic duties of the crew (usually only a driver) set out in ADR 8.3
5. If more than 1000 litres is carried then the relevant parts of the Carriage Regulations apply in full. Amongst other things you will need to appoint a Dangerous Goods Safety Advisor who will be qualified to advise on the full requirements (see ADR 1.8.3).
6. If part of the journey involves the shipment of oxygen cylinders by Air or Sea then you should check with the relevant authorities i.e. the Civil Aviation Authority (CAA) on Tel: 01293 573800 or Maritime Coastguard Agency (MCA) on Tel: 02380 329100, as their regulations and safety measures may vary from the Carriage Regulations and ADR.
7. For guidance on exemptions, please refer to HSE's website at <http://www.hse.gov.uk/cdg/manual/exemptions.htm#ADR> See also <http://www.hse.gov.uk/cdg/manual/commonprobs.htm#medicalgases> for a discussion of carriage of medical gases in small quantities.

## Private Carriage of Oxygen Cylinders

8. Whilst the carriage of oxygen cylinders by private individuals is not covered by ADR or the Carriage Regulations as they are fully exempt, some simple safety precautions should be taken, such as
  - Do not smoke whilst carrying cylinders;
  - Check cylinders for obvious signs of leakage e.g. hissing sounds;
  - Keep cylinders out of direct sunlight;
  - Do not expose cylinders to high temperatures;
  - Secure the cylinders properly so that they cannot move in transit (*some cylinders may be transported horizontally or vertically; however you would need to check with the supplier*).

*However for a more detailed recommendation on the safe transport of oxygen cylinders please refer to the leaflets mentioned towards the end of this guidance note.*

## Carriage of oxygen cylinders by public transport

### ***By Bus***

9. As all buses should be non-smoking, there should not be a problem in carrying oxygen cylinders. You would need to check with the bus operator in advance as the travel with oxygen policy tends to vary between each bus line.

### ***By Rail***

10. There are no set RID Regulations for the private carriage of oxygen by rail. As with buses you would need to contact the appropriate Train Operating Company in advance to notify them of your needs and to check their specifications on the various types of equipment that you can or cannot bring aboard. Also as some rail companies still operate a smoking and non smoking policy on some of their train services, you would need to ensure you sit in the non smoking section.

### ***By Air or Sea***

11. In some cases airlines may refuse passengers on board their aircraft as they may consider them to be unsafe or unfit to travel. However, you would need to check with the airline or sea ferry in advance to obtain appropriate advice as to whether you would be able to carry your oxygen cylinders on board the aircraft or boat; or alternatively if they would be able to accommodate you.

*NOTE: Any restrictions concerning the carriage of oxygen cylinders for private use on public transport will be that of the carrier.*

## Using oxygen cylinders during carriage, on long and short journeys

12. When travelling in your own car, you have the freedom to carry your own portable oxygen equipment and to arrange for refills along the way. However, as a safety measure you should only use your oxygen cylinder when the vehicle is stationary and the engine turned off.
13. For buses/trains, in the event that you should need to use your oxygen cylinder during carriage check with the bus/train operator first. Once starting the journey advise the bus driver/steward (or another appropriate member of staff aboard the bus/train) that you may need to use it during carriage and comply with any additional requirements they impose.

14. For long journeys, always ensure that you have enough oxygen to last throughout the trip or be able to arrange for refills during ports of call (stop offs). You may also like to check with your oxygen supplier as to whether they can provide you with an oxygen conserving device for long haul trips.

### **Where can I obtain further information?**

Text of the Carriage Regulations:

[www.legislation.hmso.gov.uk/si/si2004/20040568.htm](http://www.legislation.hmso.gov.uk/si/si2004/20040568.htm)

Text of 2005 ADR:

[www.unece.org/trans/danger/publi/adr/adr2005/05ContentsE.html](http://www.unece.org/trans/danger/publi/adr/adr2005/05ContentsE.html)

"Working with ADR" booklet available on the 'Dangerous Goods transport' pages of DfT's website:

[http://www.dft.gov.uk/stellent/groups/dft\\_transsec/documents/downloadable/dft\\_transsec\\_029427.pdf](http://www.dft.gov.uk/stellent/groups/dft_transsec/documents/downloadable/dft_transsec_029427.pdf)

Enquiry email address: [dangerousgoods.roadrailuk@dft.gsi.gov.uk](mailto:dangerousgoods.roadrailuk@dft.gsi.gov.uk) (preferred contact)

Enquiry telephone/fax: 020 7944 2755/2039

Health and Safety Executive: <http://www.hse.gov.uk/cdg>

The following free booklets are available on request from BOC on Tel: 0800 111 333.

- **Guidance for Carriage of Gas Cylinders on Vehicles**
- **Using your cylinder safely at home**
- **Transport Emergency Card (Road)**

*NOTE: The above booklets from BOC are their own interpretation of the Regulations. It combines actual regulatory requirements and BOC's guidance and good practice. Ventilated vehicles are good practice; essential with toxic gases and possibly desirable with other flammable gases (to stop build up of fumes). However, there is no legal ADR requirement for ventilated vehicles nor is it a regulatory requirement for vehicles to be vented.*

Dangerous Goods Unit June 2005