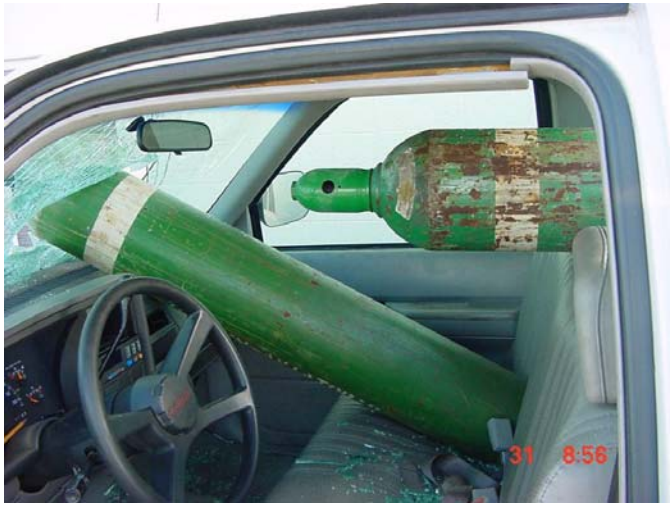
Safe Transport of Gas

25 000 LIVES TO SAVE
European Road Safety Charter

Cylinders are very heavy and will be travelling at the same speed as your vehicle. However, unlike your vehicle, they are not fitted with any brakes and unless they are adequately secured they can move forward under braking and cause severe damage.



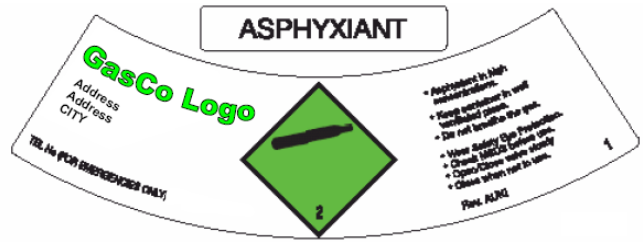
Some gases such as Propane, Carbon dioxide (CO_2) and Acetylene should not be transported lying down as the gas in these cylinders is in liquefied form, or as in the case of Acetylene dissolved in acetone. Consequently, there is a very real risk of an escape from the valve threads and gas then collecting in sufficient quantities to form an explosive or asphyxiant mixture inside the vehicle

Keep Upright:

So, make sure that all cylinders are properly secured and incapable of movement.

You should NOT transport Propane, CO_2 or Acetylene unless you can keep the cylinder upright at all times. Finally, before moving off, always check that the cylinder valve is firmly closed to prevent leakage.

Labels



- Labels state the **dangers of the gas**
- Never use or transport a gas cylinder that does not have a label
- The label is the **only way** to positively identify the contents of a cylinder
- The old colour codes are changing
  Be familiar with the hazard labels and handle accordingly

Flammable gas
danger of ignition and explosion

Oxidising gas
increases danger of fire

Inert gas
danger of death by asphyxiation

***Toxic gas**
danger of death from intoxication or poisoning

Corrosive gas
danger of death from burns

Toxic or pyrophoric gases should only be transported in open or dedicated vehicles!

Transport Regulations

Gases in cylinders are classified as **Dangerous Goods** and as such their transport is governed by European legislation.

You may have seen trucks and vans showing Orange Plates at the front and back of the vehicle.

This is because the vehicle is carrying goods that could be dangerous in the event of an accident and the plate alerts the emergency services of the dangers. If you are "at work", then these rules apply and you need to ensure that you are in compliance. Please check!

If you are transporting gas purely for domestic use by a private individual then the regulations do not apply. However, you still have a "Duty of Care" to ensure that you transport our gases safely and with due regards to other road users and members of the public.

If you do wish to transport cylinders in a private car, van or other enclosed vehicle we recommend that you read this leaflet thoroughly and follow the safety suggestions closely.

Simple Safety Rules

- **No smoking**
- **Check that cylinder valves are properly closed**
- **If the cylinder is designed to have a cylinder valve cap, then one should be fitted**
- **Ventilate your vehicle / keep windows open**
- **Dismantle equipment such as regulators, hoses and torches, etc.**
- **Ensure all cylinders are properly secured and prevented from moving during your journey**
- **Go directly to your destination**
- **Do not leave cylinders inside the trunk or in an unventilated place**
- **Immediately unload when arriving at destination or stopping for a longer time and store in a ventilated place**

Loading and Unloading

Cylinders are heavy; a 50 litre CO_2 cylinder can weigh 90 kilogrammes or more. Check that your vehicle is capable of taking the weight without being overloaded or affecting the handling or braking of the vehicle.

Consider how you are going to get the cylinders in and out of your vehicle without injury. Falling cylinders are particularly dangerous and many people are hurt when moving cylinders without considering the manual handling aspects of the task. Only carry the minimum number of cylinders that are required for the job.

Once the cylinders are out of the vehicle follow these simple rules;

- Never turn your back on a free standing cylinder
- Never try to catch falling cylinders
- Wear safety boots, gloves and safety glasses
- Place cylinders onto firm level ground
- Use a trolley to move cylinders

Ventilation

While transporting cylinders adequate ventilation is very important, ideally:

- Use an open vehicle or a vehicle designed for the transportation of gases
- The vehicle should have a gas tight bulkhead separating the driver from the load

Collecting Cylinders & Allowed Products

Allowed Products include;

- Compressed Gases (O_2, Ar, N_2)
- Dissolved Gases (DA)
- Liquid Gases (CO_2, Propane)
- Medical Oxygen gas
- Medical Oxygen liquid – ONLY ambulatory portable containers

When collecting cylinders ensure that;

- The vehicle is clean and tidy
- There are adequate stowage points for securing the load
- Ignition sources are eliminated
- Keep Hydrocarbons out of the vehicle e.g. fuel cans or oily rags

- Obtain a safety data sheet and/or a Tremcard for the gases that you are collecting
- No smoking while transporting gases
- If you do not have an open vehicle or a vehicle designed for the transportation of gases;
  - Keep windows open
  - Ensure the load is secure
  - Avoid carrying passengers
  - Remove other substances that may react with the gases

Finally remember that safe transportation is the responsibility of the driver so never take chances –

drive safely and arrive safely

See EIGA web-site for more info: www.eiga.eu

Emergency Action

The precise actions depend on the type of gas being carried, but if you do discover a leak from a cylinder containing a **flammable gas**:

- **If possible and safe**, try to move your vehicle to an isolated place
- Minimise potential ignition sources
- Ventilate your vehicle, open doors
- Do not try to enter vehicle, or turn on ignition
- If safe, try to close any valves that may be open
- Try to keep members of the public away
- Call the **Emergency services:**
  - » Give them your exact location and the number and type of cylinders involved

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A leaking non flammable – non toxic gas is best dealt with by allowing the gas to safely vent to atmosphere in a well ventilated area. Leave the vehicle and keep well back.

In either case call **your Gas Supplier** for advice: