

Transportation Information

What is ADR?

ADR is the European Agreement Concerning the International Carriage of Dangerous goods by Road.

Why was it introduced?

The purpose of the ADR is to standardise the international carriage of dangerous goods and prevent potential problems caused by the use of different languages. Currently, 47 countries (the 'United Nations') have agreed to a harmonised way of transporting dangerous goods.

Are there any exemptions?

ADR regulations do not apply when the transport is by a customer who collects gas for private use e.g. at home or leisure time. This is known as the private carriage exemption.

It also applies with ancillary carriage. This is when the cylinder is being transported as a secondary activity e.g. a roofer collecting oxy/acetylene that they are going to use at the end of the journey. Ancillary carriage exemption is limited to the relevant transport category limits ('1000 points').

Small load exemptions may apply when the other exemptions above are not applicable. This is referred to also as '1000 points' or 'ADR lite'. Small loads relate to delivery drivers whose role is to deliver dangerous goods.

Any rules for small load exemption?

- The driver must have received documented training to cover 'awareness' of the nature and hazards of the dangerous goods carried.
- An ADR compliant 2kg dry powder fire extinguisher MUST be carried.
- The load must be correctly stowed and secured for normal traffic conditions.
- A suitable vehicle must be used.
- Any applicable load segregation requirements must be met.

Transport Category Loads

ADR Transport Category	Type of Dangerous Goods	Vehicle Load Limit KG/Litre	Multiplier (per KG/Litre) for mixed loads
2	Flammable Gases (2.1 with red primary hazard label)	333	3
3	Asphyxiating and Oxidising Gases (2.2 with green or yellow hazard label)	1,000	1
4	Empty, unclean cylinders	Unlimited	-

When carrying different transport categories on the same vehicle, the ADR points must be added together. They must equal under 1000 points in order to qualify as a small load and therefore not restricted by all requirements of ADR.

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Below is a breakdown of what each Hobbyweld cylinder is worth (when full) - ADR points wise.




ORIGINAL		PLUS		ULTRA	
Hobbyweld 5	9	Hobbyweld 5	20	Hobbyweld 5	30
Hobbyweld 15	9	Hobbyweld 15	20	Hobbyweld 15	30
Hobbyweld Argon	9	Hobbyweld Argon	20	Hobbyweld Argon	30
Hobbyweld Oxygen	9	Hobbyweld Oxygen	20	Hobbyweld Oxygen	30
Hobbyweld Acetylene	15	Hobbyweld Acetylene	30	Hobbyweld Acetylene	48

Remember:

- For compressed gases, the nominal capacity of the cylinder ('water volume') in litres is used.
- For liquefied gases (such as CO2 or LPG) or dissolved gas (Acetylene) the actual net mass of product, in KG, must be used.

If any goods accumulate to over the '1000 points", drivers must have a full ADR license and abide by all ADR requirements. Please refer to www.unece.org for more information.

Goods Characteristics

Warning Labels	Class/Transport Category	Hazard Characteristics	Additional Guidance
	2.2	Non-flammable, Non-toxic Gases Risk of asphyxiation May be under pressure May cause frostbite Containments may explode when heated	Take cover Keep out of low areas Move personnel to fresh air Prevent leak if safe to do so
	2.2 (Sub Cat 5.1)	Oxidizing Substances Risk of asphyxiation May be under pressure Risk of vigorous reaction, ignition and explosion when in contact with combustible or flammable substances	Avoid storing with combustible materials Do not use oil or grease Move personnel to fresh air Prevent leak if safe to do so
	2.1	Flammable Gases Risk of fire or explosion May be under pressure Risk of asphyxiation May cause burns and/or frostbite Containments may explode when heated	Take cover Keep out of low areas Move personnel to fresh air Prevent leak if safe to do so Keep away from sources of ignition

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The Vehicle

ADR regulations do not specify the type of vehicle that may be used for the transport of gas cylinders. There is a basic requirement in ADR and in other road legislation that the vehicle is suitable for its intended purpose and adequately maintained. It must therefore be; roadworthy, well maintained, able to accommodate the gross weight of the load and have appropriate means for securing the load.

ALL vehicles must be taxed, insured and covered by a valid MOT certificate. Other legislation may mandate; an 'Operator's License, use of tachograph and speed limiters.

Open Vehicles

Hobbyweld always recommends the use of an open air vehicle for the carriage of gas cylinders, particularly when the main purpose of the vehicle is to deliver cylinders.



Closed Vehicles

Vehicles such as cars and vans can legally be used to transport gases as long as the load compartment is 'adequately ventilated'. It is your duty to ensure all vehicles are suitably ventilated and sufficient - or to use an open vehicle. There is no legal definition of 'adequate ventilation' - it depends upon the vehicles internal volume and the load being carried.

Hobbyweld recommends that delivery vehicles should have separate drivers cab to the load space.

BCGA guidance (CP31) states 'ventilation of closed vehicle spaces where cylinders are carried should have; a minimum of 2% of floor area as ventilation area which is fixed and non adjustable at low level and also a fixed vent, preferably a roof spinner or similar vent at high level'.

If you will be using a closed vehicle to transport gas cylinders to and from customers, the cargo doors must display the following sign with lettering no less than 25mm high:

**WARNING
NO VENTILATION
OPEN WITH CAUTION**

Placarding

'Placards' are the large diamond signs seen on bulk vehicles and all gas pallet deliveries, corresponding to the hazardous good(s) being carried. These diamonds are advised to be displayed on any vehicle delivering dangerous goods. It is not required by law however Hobbyweld highly suggest displaying the placards.



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Emergencies

In the event of an accident or emergency that may occur or arise during carriage, the members of the vehicle crew shall take the following actions where safe and practical to do so:

- Apply the braking system, stop the engine and isolate the battery by activating the master switch where available.
- Avoid sources of ignition, in particular, do not smoke or switch on any electrical equipment.
- Inform the appropriate emergency services, giving as much information about the incident or accident and substances involved as possible.
- Put on a warning vest and place the self standing warning signs as appropriate.
- Keep the transport documents readily available for responders on arrival.
- Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind.
- Where appropriate and safe to do so, use a fire extinguisher to put out small / initial fires in tyres, brakes and engine compartments.
- Fires in load compartments shall not be tackled by members of the vehicle crew.
- Where appropriate and safe to do so, use on-board equipment to prevent leakages into the aquatic environment or the sewage system and to contain spillages.
- Move away from the vicinity of the accident or emergency, advise other person to move away and follow the advice of the emergency services.
- Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

Note to vehicle crew: Always use the instructions in writing along with a relevant material safety data sheet.

Equipment

Equipment to be carried by each member of the vehicle crew:

- A warning vest
- Portable lighting apparatus
- A pair of protective gloves
- Eye protection (e.g. safety glasses)

Equipment to be carried on board transport vehicle:

- A wheel chock of a size suited to the maximum mass of the vehicle and to the diameter of the wheel
- Two self-standing warnings signs
- Eye rinsing liquid
- ADR standard fire extinguisher

Note: This document has been prepared specifically for persons carrying Hobbyweld cylinders of a quantity below the ADR threshold. If you are carrying a quantity of dangerous goods above this threshold, a full version of the instructions in writing is available free of charge from Dixons of Westerhope Ltd.

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