

(EN) European Agreement concerning the International Carriage of Dangerous Goods by Road.



The carriage of dangerous goods by road is regulated by an International Agreement (ADR) which is regularly amended and updated every two years.

The original agreement was called "The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)" and was signed at Geneva on 30 September 1957. Currently the number of countries which adhere to ADR is 48.

The Agreement itself is short and simple. It consists of 17 articles which contain legislative principles and the procedures for Agreement subscription, application and revision, and of two Annexes that list all the instruction and provisions; Annex A contains the conditions for the goods in question, in particular as regards their packaging and labelling, and in Annex B are laid down the provision regarding the construction, equipment and operation of the vehicles carrying the dangerous goods.

In summary ADR regulations concern:

- Classification of dangerous goods with reference to transport by road.
- Dangerous Goods List; special provisions related to dan-

gerous goods packed in limited quantities.

- Packaging and containers provisions.
- Construction and testing of packagings.
- Construction and approval of vehicles.
- Conditions of carriage, loading, unloading and handling.
- Vehicle crews, equipment, operation and documentation.
- Total and partial exemptions.

Dangerous goods are defined on the basis of their properties and are divided into Classes. The Classes of dangerous goods, according to ADR, are the following:

- Class 1 - Explosive substances and articles.
- Class 2 - Gases.
- Class 3 - Flammable liquids.
- Class 4.1 - Flammable solids, self-reactive substances and solid desensitized explosives.
- Class 4.2 - Substances liable to spontaneous combustion.
- Class 4.3 - Substances which, in contact with water, emit flammable gases.
- Class 5.1 - Oxidizing substances.

- Class 5.2 - Organic peroxides.
- Class 6.1 - Toxic substances.
- Class 6.2 - Infectious substances.
- Class 7 - Radioactive material.
- Class 8 - Corrosive substances.
- Class 9 - Miscellaneous dangerous substances and articles.

Packaging Groups are used for the purpose of determining the degree of protective packaging required for Dangerous Goods during transportation. In particular:

- Group I: great danger, and most protective packaging required.
- Group II: medium danger.
- Group III: the transport of dangerous goods does not create a significant risk.

From a quantitative point of view, the dangerous goods more prevalent on the roads are the petroleum products (Class 3 - Flammable liquids), in particular the products with number: UN 1202 (Diesel fuel), UN 1203 (gasoline) and UN1223 (kerosene).

## EXEMPTIONS:

Annex A, in addition to provisions concerning dangerous substances and articles, specifies the exemptions relative to the transport on road of dangerous goods; in accordance with these exemptions it is possible to carry ADR goods in compliance with the quantities listed in par. 1.1.3.6 without any UN-approved package, driver with training certificate or safety labeled and equipped vehicle.

In the matter in question these exemptions refer to:

- exemptions related to the nature of the transport operation;
- exemptions related to quantities carried per transport unit.

## EXEMPTIONS RELATED TO THE NATURE OF THE TRANSPORT OPERATION (TOTAL EXEMPTION PAR. 1.1.3.1 ADR).

(a) The carriage of dangerous goods by private individuals where the goods in question are packaged for retail sale and are intended for their personal or domestic use or for their leisure or sporting activities provided that measures have been taken to prevent any leakage of contents in normal conditions of carriage. When these goods are flammable liquids carried in refillable receptacles filled by, or for, a private individual, the total quantity shall not exceed 60 liters per receptacle and 240 liters per transport unit. Dangerous goods in IBCs, large packagings or tanks are not considered to be packaged for retail sale.

(c) The carriage undertaken by enterprises which is ancillary to their main activity, such as deliveries to

or returns from building or civil engineering sites, or in relation to surveying, repairs and maintenance, in quantities of not more than 450 liters per packaging and within the maximum quantities specified in par. 1.1.3.6. Measures shall be taken to prevent any leakage of contents in normal conditions of carriage. These exemptions do not apply to Class 7. Carriage undertaken by such enterprises for their supply or external or internal distribution does not fall within the scope of this exemption.

## EXEMPTIONS RELATED TO QUANTITIES CARRIED PER TRANSPORT UNIT (PARTIAL EXEMPTION PAR. 1.1.3.6 ADR).

In accordance with this article, transport of dangerous goods can be partially exempt from ADR prescriptions if the quantity carried does not exceed the value indicated in a specific table (1.1.3.6.3).

Transports under par. 1.1.3.6 have the following exemptions to the regulations;

- vehicle need not have orange Plates displayed;
- no requirement to have instructions in writing;
- driver does not need ADR Vocational licence, but will need awareness training.

In particular, for petroleum products:

- for goods belonging to Packaging Group II (i.e. gasoline) the maximum quantity carried per transport unit is 333 L;
- for goods belonging to Packaging Group III (i.e. Diesel Fuel, kerosene) the maximum quantity carried per transport unit is 1,000 L.

## IN SUMMARY:

- **Partial Exemption:** in accordance with par. 1.1.3.6, the maximum quantities which can be carried per transport unit are:

	Max Quantity [L]	Container Type
Diesel Fuel	1,000	UN Approved - ADR Homologated for Dangerous Goods of Class 3 and Packaging Group III.
Gasoline	333	UN Approved - ADR Homologated for Dangerous Goods of Class 3 and Packaging Group II.

- **Total Exemption:** in accordance with par. 1.1.3.1, the maximum quantities which can be carried are:

### par. 1.1.3.1 a), for private individuals:

	Max Quantity [L]	Container Type
Diesel Fuel and Gasoline	240 L, with a max of 60 L per unit.	Adequate for the purpose.

### par. 1.1.3.1 c), for enterprises:

	Max Quantity [L]	Container Type
Diesel Fuel	450	Adequate for the purpose.
Gasoline	333	Adequate for the purpose.