

## **ADR (Agreement International Carriage of Dangerous Goods by Road)**

ADR what stands for Agreement International Carriage of Dangerous Goods by Road (formally, the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)) is a 1957 United Nations treaty that governs transnational transport of hazardous materials. "ADR" is descended from the French name for the treaty: Accord européen relatif au transport international des marchandises Dangereuses par Route).

Concluded in Geneva on 30 September 1957 under the aegis of the United Nations Economic Commission for Europe, it entered into force on 29 January 1968. The agreement was modified (article 14, paragraph 3) in New York City on 21 August 1975, though these changes only took effect on 19 April 1985. A new amended ADR 2011 entered into force on 1 January 2011. Annexes A and B have been regularly amended and updated since the entry into force of ADR. Consequently, to the amendments for entry into force on 1 January 2015, a revised consolidated version has been published as document ECE/TRANS/242, Vol. I and II.

### **ADR parties**

As of 2016, 49 states are party to ADR: Albania, Andorra, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Montenegro, Morocco, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Tunisia, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland.

### **ADR Contents**

The agreement itself is brief and straightforward, and its most relevant article is article 2. This section states that except certain hazardous materials, hazardous materials may, in general, be transported internationally in wheeled vehicles, provided that two sets of conditions be met:

1. Annex A regulates the merchandise involved, notably their packaging and labels.
2. Annex B regulates the construction, equipment, and use of vehicles for the transport of hazardous materials.

The appendices consist of nine chapters, with the following contents:

1. General provisions: terminology, general requirements
2. Classification: classification of dangerous goods

3. Dangerous Goods List sorted by UN number, with references to specific requirements set in chapters 3 to 9; special provisions and exemptions related to dangerous goods packed in limited quantities

4. Packaging and tank provisions

5. Consignment procedures, labelling, and marking of containers and vehicles.

6. Construction and testing of packagings, intermediate bulk containers (IBCs), large packagings, and tanks

7. Conditions of carriage, loading, unloading, and handling

8. Vehicle crews, equipment, operation, and documentation

9. Construction and approval of vehicles

### **ADR Hazard classes**

Class 1.0 Explosive substances and articles

Class 2.0 Gases

Class 3.0 Flammable liquids

Class 4.0 Flammable solids, self-reactive substances, and solid desensitised explosives

Class 4.1 Substances liable to spontaneous combustion

Class 4.2 Substances which, in contact with water, emit flammable gases

Class 5.0 Oxidising substances

Class 5.1 Organic peroxides

Class 6.0 Toxic substances

Class 6.1 Infectious substances

Class 7.0 Radioactive material

Class 8.0 Corrosive substances

Class 9.0 Miscellaneous dangerous substances and articles

Each entry in the different categories is assigned a four digit UN number. It is not usually possible to deduce the hazard class(es) of a substance from its UN number: they have to be looked up in a table. An exception to this are Class 1 substances whose UN number will always begin with a 0. The UN numbers range from UN0001 to about UN3600 and are assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.