

What Are Dangerous Goods?

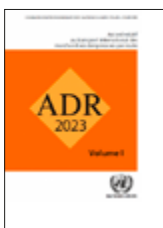
Dangerous goods are used daily, both within homes and on an industrial scale. They form part of everyday items like your mobile phone, detergents and perfumes, in some cases we eat and drink them.

This Fact Sheet looks at products that may be classified as dangerous goods for road transport and establishing what the legal obligations are.

What are 'Dangerous Goods'?

Dangerous goods come in all shapes and sizes. They may be pure chemicals, mixtures of substances, manufactured products, or articles. They can be liquids, gases or solids and even the articles that contain them. Dangerous goods pose a significant risk to people, animals and the environment if not properly handled when in use or being transported.

The UK is governed by *The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009*, referred to as the CDG Regulations. This in turn implements the *Agreement concerning the International Carriage of Dangerous Goods by Road*, known as ADR.



ADR is a multinational agreement aimed at safe transportation of dangerous goods products on road networks all around the world, over 50 countries have signed the agreement. The agreement covers the products carried, the containers and the vehicles used to transport them.

Classification

Once a harmful or dangerous substance is identified, it is tested and assessed against internationally agreed criteria called the Globally Harmonized System of Classification and Labelling of Chemicals. This process is called 'Classification' during which, if the substance meets the criteria, they are put into 'Classes.'

Classes

There are nine classes of dangerous goods, and each have their own degree of danger and class specific hazards. Certain classes have subclasses that allow further hazard identification, some common examples of products which fall within scope of these classes are:



Class 1 – Explosive substances and articles

Found in products used for quarrying, ammunition, fireworks and nail gun cartridges.



Class 2 – Gases

Flammable and non-flammable gases are found in common items such as aerosols, camping stove refills, fire extinguishers and welding equipment.



Class 3 – Flammable liquids

As well as petrol, less well known products include perfumes, whiskey and hand sanitiser.



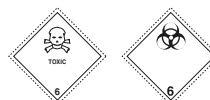
Class 4 – Flammable solids

Flammable solids include firelighters, substances liable to spontaneous combustion such as oily rags and substances which, when in contact with water, emit flammable gases.



Class 5 – Oxidizing agents and organic peroxides

These can be fertilisers that farmers spread on their crops or hydrogen peroxide used in hair colour products.



Class 6 – Toxic and infectious substances

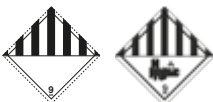
These are found in household cleaners, weed killer, medical samples and clinical waste.

**Class 7 – Radioactive**

Often found in hospital equipment, also watch faces and compasses used for navigation.

**Class 8 – Corrosive substances**

Found in household cleaners, patio cleaners, bleach and lead acid car batteries.

**Class 9 – Miscellaneous dangerous substances and articles**

These are substances that present a danger not covered in the other classes. Examples include lithium batteries, vehicle air bags, seat belt pretensioners and asbestos.

Other labels**Limited and excepted quantities**

Some products can be carried in smaller quantities depending on their degree of danger.

Carriage exemptions

The carriage of dangerous goods is highly regulated within the UK and products are carried daily on our roads. Quantities can vary depending on the product and what the operation is.

For operators that carry small amounts there are some exemptions that could be used, meaning they would fall outside the scope of the full regulations and marking requirements. The most common exemptions are listed below.

Personal use

If you are carrying goods as a private individual, and they are packaged for retail use and intended for personal use; then you can carry receptacles up to 60 litres, and up to 240 litres per vehicle.

As part of your equipment

If you must carry fuel for your equipment or paint to be used by yourself, depending on the product you could carry up to 450 litres per package within the maximum quantities specified in 1.1.3.6 of ADR. See the following table.

Exemptions related to quantities carried per transport unit.

Each dangerous substance or article is given a 'Transport Category' of 0 – 4. This relates to the degree of danger that

the substance has. The transport category and maximum quantities are set out in the table below from 1.1.3.6 of ADR.

Transport Category	Maximum total quantity per transport unit. (Ltr/kg)
0	0
1	20
2	333
3	1000
4	Unlimited

Petrol is assigned as a transport category 2 substance, meaning you can only carry up to 333 litres per vehicle. Diesel however is a transport category 3 substance, therefore you can carry up to 1000 litres per vehicle.

There are further calculations needed if you are carrying multiple substances, details of which can be found in ADR 1.1.3.6.4 or contact the Member Advice Centre.

Training

The types and quantities of dangerous goods carried will determine the type of training required. Aside from full ADR training for drivers and a Dangerous Goods Safety Advisor (DGSA), there are other conditions that don't require the same level of training.

If you are carrying dangerous goods in retail packaging for personal use, then you would not require any training. However, you would be advised to read the instructions on the packaging on how to handle the item.

Whilst carrying dangerous goods for use in your daily work such as spray paints or gas bottles, no formal training is required. However, under Health and Safety legislation a risk assessment may decide that in house training would be required to ensure that the products are carried safely and prevent damage and leakages. This may also include the carriage of a fire extinguisher in the vehicle that is easily accessible to the driver.

If you are looking at delivering dangerous goods under the 'exemption related to quantities carried per transport unit', then the driver would require 'Driver Awareness Training'. This is a formal course that needs to be documented, as it covers all aspects relating to product carriage, how to secure the items and what to do in the event of an incident or spillage. The vehicle would also have to carry a 2kg dry powder fire extinguisher or equivalent.

References

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 and amendments.

Agreement concerning the International Carriage of Dangerous Goods by Road ((ADR) English translation).