

# ADR

Dangerous Goods  
Driver Training Qualifications

## Core Unit

Instructor Notes & Interface

SAMPLE



# ADR

Dangerous Goods  
Driver Training Qualifications



## Sample Guide

The pages in this sample have been taken from:

**ADR - Core unit**

(It is not a full guide, it is just selected pages from the full ADR core unit).



## What is this Unit about?

This specification is based on the training requirements drawn up by the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations (as amended) which apply the provisions of ADR European Agreement concerning the International Carriage of Dangerous Goods by Road Council Directive (as amended).

## What should the candidate know or be able to do before they start?

It is anticipated that those undertaking this Unit will have some relevant knowledge gathered by either working in the freight logistics industry or through prior study.

## What will the candidate know or be able to do when they achieve this Unit?

On successful completion of this Unit, you should have sufficient knowledge to enable you to effectively carry out your role as a driver of dangerous goods throughout the UK and Europe, as specified in the current ADR and UK Regulations. This will enable you to take measures that may prove necessary for your own safety and for that of the public and environment for limiting the effects of an incident and or accident.

## What does this involve?

Compulsory attendance on an approved training course will be required.

### Initial Candidates:

**11 x 45 minute** Teaching Units, including practical exercises.

### Refresher Candidates:

**6 x 45 minute** Teaching Units, including practical exercises.

## How will this Unit be delivered?

This Unit will be delivered in accordance with the prescribed standards in a classroom environment with class participation, together with the use of illustrative examples, visual aids and where applicable practical demonstrations.

The practical exercise will be done by means of:

1. Instruction, followed by a desktop exercise based on a written pre-approved scenario and completed individually for the emergency incident and or accident exercise.
2. Instruction and demonstration, using a suitable resuscitation model, and other members of the class as appropriate, and by practice on the model and on each other as appropriate for the first aid exercise.
3. Instruction and demonstration, using examples of fire extinguishers and a suitable video for the fire prevention exercise.

## How will the candidate show that they have achieved this Unit?

This Unit will be assessed by multiple choice examination(s). You must achieve a minimum pass mark of 70% and complete the practical exercises to the satisfaction of the course Instructor.

Any failed examination must be retaken and successfully completed with any examination passes being held for a maximum of 12 months from original notification of result.

## C.1 The General Requirements Governing The Carriage Of Dangerous Goods

### C.1.1 Regulations concerning the need for training of all persons involved, to mention the Health & Safety at Work Act (Section 2 — general duties of employers to their employees).

#### Health & Safety at Work Act

##### Explain that:

The HASAWA places duties on employers and employees.

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#### Further Reading



**Health and Safety at Work etc Act 1974**  
<http://www.hse.gov.uk/legislation/hswa.htm>

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#### Section 2 - General duties of employers to their employees:

- ◆ It shall be the duty of every employer to ensure, so far as is reasonably practicable, **the health, safety and welfare at work of all his employees.**

#### Section 7 - General duties of employees at work:

It shall be the duty of every employee while at work:

- a. To take reasonable care for the health and safety of himself and of other persons who may be affected by his acts or omissions at work; and
- b. As regards any duty or requirement imposed on his employer or any other person by or under any of the relevant statutory provisions, to co-operate with him so far as is necessary to enable that duty or requirement to be performed or complied with.

## Explosives Class 1 and Radioactive Class 7

### Explain that:

Drivers have to attend specialist training courses for both of these classes.

## Crew Training

### Explain that:

ADR requires that all members of vehicle crew have received some training in order to ensure safety of themselves, the vehicle and the load.

## Training of other Employees

### Explain that:

All employees who are involved in dangerous goods transport activities must be trained as per 8.2.3 so this means that the crew member who will not be driving still needs to be trained.

In addition to this all other personnel who are involved in the transport chain must have received training commensurate with their role and responsibilities as per 1.3 of ADR. This covers General Awareness, Function Specific and Safety training. 1.4 of ADR identifies those areas where personnel should receive

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### C.1.2 Employers' responsibility to conduct a risk assessment.

#### Explain that:

If you are an employer or self-employed. It is a legal requirement for every employer and self-employed person to make an assessment of the health and safety risks arising out of their work. The purpose of the assessment is to identify what needs to be done to control health and safety risks. Regulation 3 of the Management of Health and Safety at Work Regulations 1999.

#### Explain that:

A risk assessment consists of:

- ◆ Identifying what can harm people in your workplace
- ◆ Identifying who might be harmed and how
- ◆ Evaluating the risks and deciding on the appropriate controls, taking into account the controls you already have in place
- ◆ Recording your risk assessment
- ◆ Reviewing and updating your assessment.

#### C.1.4

- ◆ ADR, RID, IMDG, ICAO & Domestic Regulations
- ◆ Information on multi-modal transport operations
- ◆ The interrelation of road/sea/rail/air Regulations and operations at points of interchange.

#### Explain that:

‘Dangerous goods’ are materials or items with hazardous properties which, if not properly controlled, present a potential hazard to human health and safety, infrastructure and/or their means of transport.

#### Explain that:

The transportation of dangerous goods is controlled and governed by a variety of different regulatory regimes, operating at both the national and international levels. These regulatory regimes govern the means by which dangerous goods are to be handled, packaged, labelled and transported.

#### Explain that:

Transport of dangerous goods is regulated in order to prevent, as far as possible, accidents to persons or property and damage to the environment. There are specific requirements related to particular classes of goods. With this system of classification, listing, packing, marking, labelling, placarding and documentation in general use, carriers, consignors and inspecting authorities benefit from simplified transport, handling and control and from a reduction in time consuming formalities. Obstacles to the international transport of such goods are reduced accordingly.

### The United Nations

#### Explain that:

The UN produces recommendations on the transport of dangerous goods in

ADR Volume 1	ADR Volume 2
Introduction	Using Packages & Tanks
Legal Agreement	Marks, Labels & Placards
General Duties	Documentation
Classification & Identification	Package & Tank Construction
Dangerous Goods List	Loading & Unloading
Alphabetical Index	Driver/Crew Duties & Equipment
Substance Special Provisions	Vehicle Construction
Limited Quantities	
Excepted Quantities	

### **C.1.6 Hierarchy of control of all parties involved including, responsibilities of Consignors, Carriers, Drivers, Consignees and the role of the DGSA.**

#### **Explain that:**

The safety obligations of the main participants in the transport chain are detailed in chapter 1.4 of ADR.

#### **Consignor**

The consignor of dangerous goods is required to hand over for carriage only consignments which conform to the requirements of ADR. He shall in particular:

- ◆ Ascertain that the dangerous goods are classified and authorised for carriage in accordance with ADR
- ◆ Furnish the carrier with information and data in a traceable form and, if necessary, the required transport documents and accompanying

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### **C.1.7 The main hazards of substances in Classes 2, 3, 4, 5, 6, 8 and 9, and Classes 1 and 7 Specialist training requirements.**

#### **Classification**

#### **Explain that:**

Within the UN system there are 9 classes of Dangerous Goods. These classes are based on the major danger present in a substance or article. Any other risks which that substance or article possesses are known as subsidiary risks.

Some of these 9 classes are further sub-divided and this has been done to more accurately describe the risk.

#### **Explain that:**

There are detailed criteria for allocating substances to each of these classes.

#### **Class 1: Explosive substances and articles**

- ◆ Explosive substances – solid or liquid substances (or mixtures of substances) capable, by chemical reaction, of producing gasses at such a temperature and pressure and at such a speed as to cause damage to the surroundings.



- ◆ Pyrotechnic substances – substances or mixtures of substances designed to produce an effect by heat, light, sound, gas or smoke, or a combination of these as the result of non-detonating self-sustaining exothermic chemical reactions.

This class requires specialist training.

## Class 2: Compressed, liquefied, or dissolved under pressure

Class 2 covers pure gases, mixtures of gases, mixtures of one or more gases with one or more substances and articles containing such substances. The substances and articles of class 2 are subdivided as follows:

- ◆ Compressed gas – a gas which when packaged under pressure for carriage is entirely gaseous at -50°C. This category includes all gases with a critical temperature less than or equal to -50°C
- ◆ Liquefied gas – a gas which when packaged under pressure for carriage is partially liquid at temperatures above -50°C. A distinction is made between this and the third row
- ◆ Refrigerated liquefied gas – a gas which when packaged for carriage is made partially liquid because of its low temperature
- ◆ Dissolved gas – a gas which when packaged under pressure for carriage is dissolved in a liquid phase solvent
- ◆ Small aerosol dispensers and receptacles containing gas (gas cartridges)
- ◆ Other articles containing gas under pressure
- ◆ Non-pressurised gases subject to special requirements (gas samples).

For transport purposes these are placed in to 3 divisions based on their properties to give the 3 subdivisions which we are familiar with:

- ◆ **Class 2.1** – Flammable gases – those which can form an explosive mixture with air
- ◆ **Class 2.2** – Non Flammable Non Toxic Gases – the principle hazard of which is pressure but which can also have asphyxiant or oxidising properties
- ◆ **Class 2.3** – Toxic Gases – those which can cause death or injury by inhalation or skin contact.

## Class 3: Flammable liquids

- ◆ Substances and articles which are liquids
- ◆ Substances and articles which have a flashpoint of not more than 60°C
- ◆ Liquid substances and molten solid substances with a flashpoint of more than 60°C and which are carried, or handed over for carriage, whilst heated at temperatures equal to, or higher than, their flashpoints
- ◆ Liquid desensitised explosives – explosive substances which are dissolved or suspended in water, or other liquid substances, to form an homogenous liquid mixture to suppress their explosive properties.

## Class 4: Flammable substances

### 4.1 Flammable solids

Readily combustible solids and solids which may cause fire through friction. Readily combustible solids are powdered, granular, or pasty substances which are dangerous if they can be easily ignited by brief contact with an ignition source, such as a burning match, and if the flame spreads rapidly. The danger may come not only from the fire, but also from toxic combustion products. Metal powders are especially dangerous because of the difficulty of extinguishing a fire since normal extinguishing agents such as carbon dioxide or water can increase the hazard.

### 4.2 Spontaneously combustible

Pyrotechnic substances – substances including mixtures and solutions (liquid or solid) when even in small quantities ignite on contact with air within five minutes. These are the class 4.2 substances the most liable to spontaneous combustion

Self-heating substances and articles – substances and articles, including mixtures and solutions which, on contact with air and without energy supply, are liable to self-heating. These substances will ignite only in large amounts (kilogrammes) and after long periods of time (hours or days).

Self-heating of these substances, leading to spontaneous combustion, is caused by reaction of the substance with oxygen (in the air) and the heat developed not being conducted away rapidly enough to the surroundings. Spontaneous combustion occurs when the rate of heat production exceeds the rate of heat loss and the auto-ignition temperature is reached.

### 4.3 Dangerous when wet

Substances which react with water to emit flammable gases liable to form explosive mixtures with air and articles containing such substances.



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**C.1.8 The allocation and purpose of UN Numbers and proper shipping names.**

**Identification**

**Explain that:**

Identification is the part of the process where a UN Number and Proper Shipping Name are chosen for the substance that has been classified.

**Explain that:**

The Dangerous Goods List has 4 categories of entry:

- ◆ A. Single Entries
- ◆ B. Generic Group Entries
- ◆ C. Specific N.O.S. Entries
- ◆ D. General N.O.S. Entries.

**A. Single Entries**

These are well defined substances or articles such as:

- ◆ UN 1230 METHANOL
- ◆ UN 1170 ETHANOL.

**B. Generic Group Entries**

These too are well defined, but are groups of products rather than a specific single entry, such as:

- ◆ UN 3269 POLYESTER RESIN KITS
- ◆ UN 1999 TARS, LIQUID
- ◆ UN 2837 BISULPHATES, AQUEOUS SOLUTION.

Transport Category	Substances or articles packing group or classification code/group or UN No.	Maximum total quantity per transport unit
(1)	(2)	(3)
0	Class 1: 1.1A/1.1L/1.2L/1.3L and UN No. 0190 Class 3: UN No. 3343 Class 4.2: Substances belonging to packing group I Class 4.3: UN Nos. 1183, 1242, 1295, 1340, 1390, 1403, 1928, 2813, 2965, 2968, 2988, 3129, 3130, 3131, 3134, 3148, 3396, 3398 and 3399 Class 5.1: UN No. 2426 Class 6.1: UN Nos. 1051, 1600, 1613, 1614, 2312, 3250 and 3294 Class 6.2: UN Nos. 2814 and 2900 Class 7: UN Nos. 2912 to 2919, 2977, 2978 and 3321 to 3333 Class 8: UN No. 2215 (MALEIC ANHYDRIDE, MOLTEN) Class 9: UN Nos. 2315, 3151, 3152 and 3432 and articles containing such substances or mixtures and empty uncleaned packagings, except those classified under UN No. 2908, having contained substances classified in this transport category.	0
1	Substances and articles belonging to packing group I and not classified in transport category 0 and substances and articles of the following classes: Class 1: 1.1B to 1.1J a /1.2B to 1.2J/1.3C/1.3G/1.3H/1.3J/1.5D a Class 2: groups T, TC a, TO, TF, TOC a and TFC aerosols: groups C, CO, FC, T, TF, TC, TO, TFC and TOC chemicals under pressure: UN Nos. 3502, 3503, 3504 and 3505 Class 4.1: UN Nos. 3221 to 3224, 3231 to 3240, 3533 and 3534 Class 5.2: UN Nos. 3101 to 3104 and 3111 to 3120	20
2	Substances belonging to packing group II and not classified in transport categories 0, 1 or 4 and substances and articles of the following classes: Class 1: 1.4B to 1.4G and 1.6N Class 2: group F aerosols: group F chemicals under pressure: UN No. 3501 Class 4.1: UN Nos. 3225 to 3230, 3531 and 3532 Class 4.3: UN Nos. 3292 Class 5.1: UN Nos. 3356 Class 5.2: UN Nos. 3105 to 3110 Class 6.1: UN Nos. 1700, 2016 and 2017 and substances belonging to packing group III Class 9: UN No. 3090, 3091, 3245, 3480 and 3481	333



### C.2.4 Environmentally hazardous substance mark.

#### Explain that:

All packages containing Environmentally Hazardous substances, except single packages or combination packages with contents of 5litres or less of liquids or 5kg or less for solids there is the requirement to display the EHS diamond shaped mark shown here.

The environmentally hazardous mark will be next to the UN No. This mark must be 100mm x 100mm (but can be smaller if package will not take full size).



## C.3 Driver Responsibilities During The Carriage Of Dangerous Goods

### C.3.1 Documents relating to the vehicle, the load (transport document, waste consignment note and instructions in writing), and the driver (ADR Certificate).

#### Explain that:

ADR specifies that when transporting dangerous goods the following documentation must be carried on the vehicle:

- ◆ The transport documents
- ◆ When appropriate, the large container or vehicle packing certificate
- ◆ The instructions in writing
- ◆ Means of identification, which include a photograph for each member of the vehicle crew.

Where required, the following documents shall be carried:

- ◆ The certificate of approval for the vehicle and trailer
- ◆ The driver's training certificate
- ◆ A copy of the competent authority approval.

#### Explain that:

The instructions in writing shall be kept readily available.

## C.4.2 How to segregate dangerous substances.

### Explain that:

There must be no possibility of mixing, even in an accident.

### Foodstuffs

### Explain that:

There are some stringent requirements placed when foodstuffs are to be carried in the same vehicle as dangerous goods. These requirements cover distances between packages, partitions and coverings and are examined at 7.5.4 of ADR.

Foodstuffs and foodstuffs packaging, human or animal, must be segregated from dangerous goods on the vehicle, toxics in particular.

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## C.5 Enforcement Action

### C.5.1 Enforcement Agencies, non-compliance and penalties.

### Explain that:

In the UK, the rules are enforced by the HSE, DVSA and the police. Deficiencies can be prosecuted under the CDG regulations and as such any convictions will be under criminal law and result in a criminal record. Roadside interventions are also published on the HSE website and many customers review this as part of supplier monitoring which can have commercial repercussions for the carrier.

Extract from HSE web site:

Roud Recycling	Canterbury, Kent	01/03/2017	Hampshire Constabulary	Checking officer or emergency responder is unable to correctly identify the correct nature of the packages and the separate quantities involved from the details available.
Brenntag UK Limited	Lutterworth, Leicestershire	22/03/2017	Suffolk Constabulary	Driver unable to fight a minor fire which has the potential to affect the vehicle and load putting the public at risk. 9kg fire extinguisher needle showing 'low red' and discharge within the storage container.

## Explain that:

There are potential penalties:

- ◆ Verbal Advice
- ◆ Prohibition Notice
- ◆ Fines
- ◆ Imprisonment.

Examples from HSE Guidance:

No or inappropriate details of the nature & quantity of dangerous goods. The information specified in ADR 5.4 (and 5.5 where relevant) should form part of the transport document.			1	PN	A PN is appropriate if the information is so lacking that the inspector is unable to identify what is being carried.
Fire Extinguishers					
Green	Overdue more than 3 months	PN (immediate or deferred depending on whether 2nd FE is in good order) Note: a second FE is not always required.			1 or 2
	Overdue 1 – 3 months	Deferred PN			2
	Overdue up to 1 Month	Written report			3
	In date	None			N/A
Placarding					
No orange plates and in scope	5.3	1	PN	For tanks/bulk only, CDG Regs Regulation 6 requires GB regd. vehicles on GB national journeys to display the Emergency Action code in place of the HIN. For tanks only, an emergency telephone number also has to be displayed. Usually combined as the “Hazard warning panel” though that is optional.	





## C.6 Security and “High Consequence Dangerous Goods”

### C.6.1 Security and High Consequence Dangerous Goods and when this applies.

Explain that:

Class	Division	Substance or Article	Quantity		
			Tanks (l) <sup>c</sup>	Bulk (kg) <sup>d</sup>	Packages (kg)
1	1.1	Explosives	a	a	0
	1.2	Explosives	a	a	0
	1.3	Compatibility group C explosives	a	a	0
	1.4	Explosives of UN Nos. 0104, 0237, 0255, 0267, 0289, 0361, 0365, 0366, 0440, 0441, 0455, 0456 and 0500	a	a	0
	1.5	Explosives	0	a	0
2		Flammable gases (classification codes including only the letter F)	3000	a	b
		Toxic gases (classification codes including letters T, TF, TC, TO, TFC or TOC) excluding aerosols	0	a	0
3		Flammable liquids of packing groups I and II	3000	a	b
		Desensitized explosives	0	a	0
4.1		Desensitized explosives	a	a	0
4.2		Packing group I substances	3000	a	b
4.3		Packing group I substances	3000	a	b
5.1		Oxidizing liquids of packing group I	3000	a	b
		Perchlorates, ammonium nitrate, ammonium nitrate fertilisers and ammonium nitrate emulsions or suspensions or gels	3000	3000	b
6.1		Toxic substances of packing group I	0	a	0
6.2		Infectious substances of Category A (UN Nos. 2814 and 2900, except for animal material)	a	0	0
8		Corrosive substances of packing group I	3000	a	b

### C.8.3 Decontamination procedures to be followed.

#### Explain that:

Known contamination of protective clothing represents a significant problem that cannot be overlooked. The wearing of contaminated protective clothing can cause extended exposure to hazardous chemicals that may have either acute or long term effects. There is also the risk of cross contamination. Specific strategies for decontaminating the clothing to effectively remove the contaminants must be used for each substance based on the MSDS information.

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## C.9 The Administration Of Basic Emergency First Aid Techniques

### C.9.1 Assess the situation including any dangers to the driver, casualties and bystanders.

#### Explain that:

Before commencing first aid always check for danger for you, the casualty and bystanders.

#### Explain that:

Dangers can include:

- ◆ Traffic
- ◆ Glass
- ◆ Metal
- ◆ Drink
- ◆ Personal Attack
- ◆ Blood.

#### Explain that:

Drivers should always STOP and assess the situation:

- ◆ Stop and Think
- ◆ Traffic
- ◆ Obvious and Non Obvious Hazards (Electricity, Gas, Asphyxiation)
- ◆ Protection Methods.

### Explain that:

The aims of first aid are to:

#### Preserve Life

Not only the casualty's life, but your own as well. Far too often only one person's life is in danger when the emergency services are called, but by the time they arrive there are more. If you put your life in danger, you can end up fighting for your OWN life instead of the casualty's.

#### Prevent the Situation from Worsening

The skilled first aider must take action to prevent the whole situation from becoming worse (e.g. removing dangers such as traffic or fumes), as well as acting to prevent the casualty's condition from deteriorating.

#### Promote Recovery

The actions of a first aider should, after preventing things from getting worse, help the casualty to recover from their illness or injury.

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Video - Buying Time  
(2 minutes)

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### Priorities Of Treatment

#### Explain that:

The first priority with any patient is to make sure the **Airway** is open and then to check they are **Breathing** normally (A and B). If the patient is breathing normally, this means that their heart must also be beating, so blood is being circulated around the body. As the A and B check is carried out first, we call it the 'primary survey'.

### What Happens Without Oxygen?

#### Explain that:

All animal life needs a constant supply of oxygen to survive. If that oxygen is taken away for any reason, brain cells will start to die within 3 to 4 minutes. The priorities of treatment are therefore aimed firstly at getting oxygen into the blood stream, ensuring that the blood is circulating around the body, and then preventing the loss of that blood. If this aim is achieved, then the majority of casualties will still be alive when the ambulance arrives.

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## Video - Recovery Position (6 minutes)

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### C.9.8 CPR & Recovery Position

Explain and demonstrate the recovery position:

- ◆ Kneel on the floor to one side of the person
- ◆ Place the person's arm that is nearest you at a right angle to their body, so that it is bent at the elbow with the hand pointing upwards. This will keep it out of the way when you roll them over.
- ◆ Gently pick up their other hand with your palm against theirs (palm to palm). Now place the back of their hand onto their opposite cheek (for example, against their left cheek if it is their right hand). Keep your hand there to guide and support their head as you roll them.
- ◆ Use your other arm to reach across to the person's knee that is furthest from you, and pull it up so that their leg is bent and their foot is flat on the floor.
- ◆ Gently pull their knee towards you so that they roll over onto their side, facing you. Their body weight should help them to roll over quite easily.
- ◆ Move the bent leg that is nearest to you, in front of their body so that it is resting on the floor. This position will help to balance them.
- ◆ Gently raise their chin to tilt their head back slightly, as this will open up their airway and help them to breathe. Check that nothing is blocking their airway. If there is an obstruction, such as food in their mouth, remove this if you can do so safely. Stay with them, giving reassurance, until they have fully recovered.



### Explain and Demonstrate CPR

- ◆ Kneel by side of casualty
- ◆ Place heel of hand in centre of chest with second hand on top
- ◆ Interlock fingers, arms straight
- ◆ 30 Chest Compressions
- ◆ Depth 5-6cm
- ◆ Rate 100-120 per minute.

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## Video - CPR (10 minutes)

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### C.10.3 Different types of fire extinguishers

#### Explain that:

The different types of fire extinguisher:

- ◆ Powder - Blue label - The best all round for all fires
- ◆ Foam - Cream Label - Good for fuels but dangerous for electrical fires
- ◆ Water - Red Label - No good for liquid fuel or electrical, good for solid fuels
- ◆ Carbon Dioxide - Black Label - Good for electrical & flammable liquid fires. Removes Oxygen.

* A Powder Extinguisher will leave a residue that can damage sensitive electrical equipment. If possible, use a CO2 Extinguisher.		Wood, paper, textiles and other carbonaceous materials. 	Flammable liquids, petrols and spirits. 	Flammable gasses. For example propane and butane. 	Fires involving burning materials. 	Fires caused by electrical equipment where electric current may be present. 	Cooking oil and fat. For example olive oil, maize oil, lard and butter. 
<b>WATER</b>		✓	✗	✗	✗	✗	✗
<b>FOAM</b>		✓	✓	✗	✗	✗	ABF Foam Only
<b>DRY POWDER</b>		✓	✓	✓	✗	✓ *	✗
<b>L2</b>		✗	✗	✗	✓	✗	✗
<b>CO2 GAS</b>		✗	✓	✗	✗	✓	✗
<b>WET CHEMICAL</b>		✓	✗	✗	✗	✗	✓
<b>WATER MIST</b>		✓	✓	✓	✗	✓	✓



### C.10.4 Identification and correct use of fire extinguishers

Video - Use of Fire Extinguishers  
(11 minutes)



## C.11 What To Do In The Case Of An Incident Or Accident

### C.11.1 General Actions ensuring personal safety

#### Explain that:

An emergency is where the driver has no control of the situation eg. spillage, vehicle accident or fire.

How it's dealt with depends on:

- ◆ The type of hazard
- ◆ The quantity of product released
- ◆ The number of people in the vicinity
- ◆ Whether people are in the open or indoors
- ◆ The weather conditions
- ◆ The nature of the surrounding area
- ◆ Any injuries
- ◆ The potential for fire
- ◆ Subsequent danger from the particular hazard of the product.

#### Explain that:

In the event of an accident or emergency that may occur or arise during carriage, the members of the vehicle crew shall take the actions listed on the Instructions in Writing where safe and practicable 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, use electronic cigarettes or similar devices, or switch on any electrical equipment
- ◆ Put on the warning vest and place the self-standing warning signs as appropriate
- ◆ Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind
- ◆ Move away from the vicinity of the accident or emergency, advise other persons 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.



### C.11.6 Preventing the escape of dangerous goods and environmental damage

#### Explain that:

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.

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Video - Dealing with Spillages  
(12 minutes)

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### C.11.7 Reporting procedures and notification of occurrences involving the transport of dangerous goods, informing the carrier and RIDDOR requirements.

#### Explain that:

You must inform the carrier as they may need to report the incident under RIDDOR.

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### C.11.8 The requirements for reporting serious accidents and incidents to the Competent Authority

#### Explain that:

ADR identifies the occasions when an incident has to be reported to the competent authority. 1.8.5.3 states that where there has been a personal injury or there was a loss or imminent risk of loss of product, environmental damage or an involvement of the authorities according to the criteria in that section, then it must be reported within one month after the occurrence.

#### Training note:

This subject is to include an exercise based on a written scenario to be completed individually.

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# Emergency Practical Exercise

This scenario can either apply to packages or tanks.

Your vehicle is loaded with a full load of a liquid which is both flammable and corrosive. You are stopped at a set of traffic lights on a rural main road just coming into a village and just about to cross a river bridge on which the council are removing the white lines using a heat lance and burner. The road you have stopped on is downhill and the wind is blowing towards the council workers, river and village.

As the light turns to green and you go to move off, you feel a thump and hear a bang. On looking in the mirror you see a man getting out of a transit van behind you.

## 1. What is your first action?

**Apply the braking system, stop the engine and isolate the battery by activating the master switch where available.**

On approaching the rear of the vehicle you see that you have been hit from behind by a transit pick up carrying scaffolding. Two of the scaffolding bars overhanging the cab have punctured the rear of your vehicle and liquid is running out onto the road and the bonnet of the transit.

## 2. The transits engine is still running what do you do?

**Turn the engine off.**

The driver of the van is wandering around but his passenger has banged his head and is dazed in the passenger seat.

## 3. Do you leave him in the van or get him out?

**Get him out.**

The liquid is running towards your cab.



#### 4. What do you need to get quickly?

##### **The Transport Documents and PPE**

Another car arrives and the driver offers to call 999.

#### 5. What information do you need to give them to tell the emergency services?

**The location, the number of casualties and the substance or substances involved.**

The van driver has now returned and has asked if they can help.

#### 6. What can you ask them to do?

## End of Core

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# ADR

Dangerous Goods  
Driver Training Qualifications



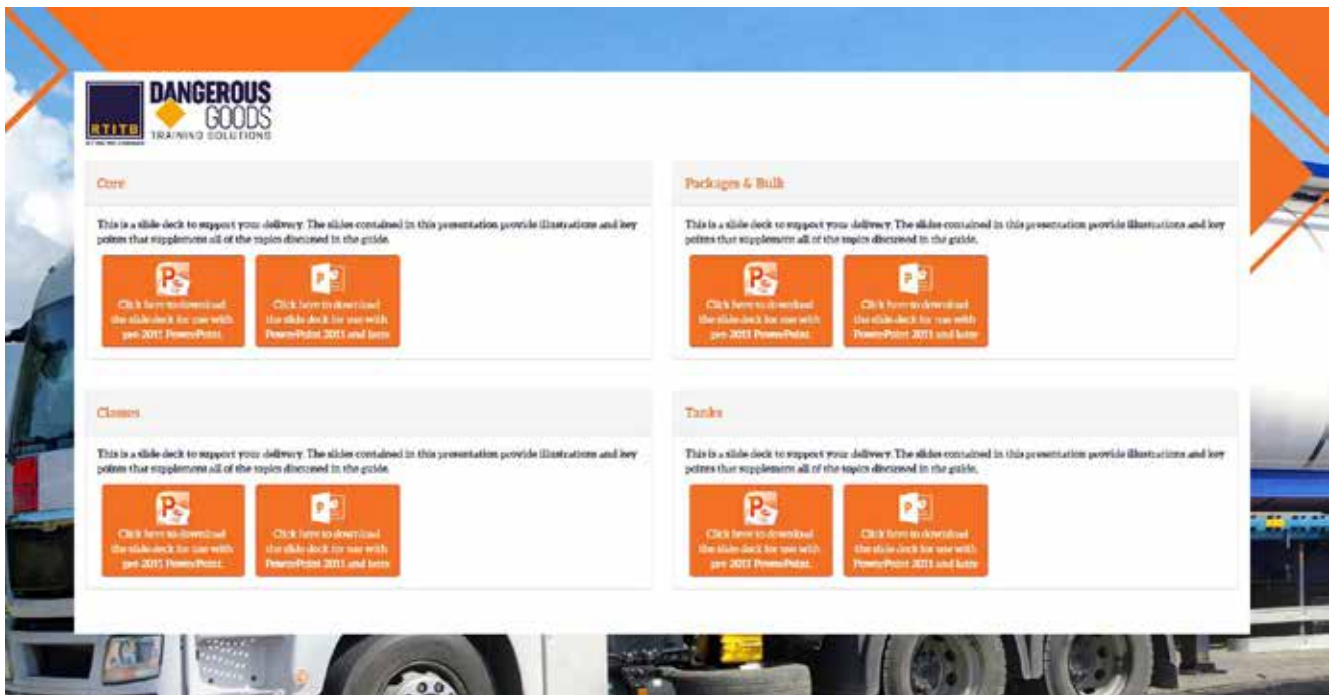
## Sample USB Content

Included with the ADR Core Unit Instructor Guide is a USB containing a course delivery PowerPoint and any supporting articles and documents.

Below is what you will see when you open your USB, some sample slides (in pdf format).

Please take a look so that you can compare the quality of our course materials with any others you may be considering for your business.

What you will see when you open up your USB:



Presentation Example Slides:



## Presentation Example Slides:

### REQUIREMENT FOR TRAINING HEALTH & SAFETY AT WORK ACT



1. Every employer to ensure the...



Health



Safety



Welfare

...at work of all his employees

2. Training





### COURSE OBJECTIVES



-  • Make aware of hazards
-  • Minimise the likelihood of an incident
-  • Measures for their own safety and that of the public and the environment
-  • Limiting the effects of an incident



### DRIVER TRAINING ADR



On successful completion of the exams:



Receive a "Vocational Training Certificate"



Valid for 5 years



Renewed in the last 12 months of the current certificate



New certificate for 5 years PLUS the time remaining on the current certificate



## Presentation Example Slides:

### TRAINING OF OTHER EMPLOYEES



**ALL EMPLOYEES**  
who are involved in dangerous goods transport activities must be trained commensurate with their role and responsibilities



### WHY REGULATIONS?



-  **SAFETY:**  
To prevent accidents.
-  **SIMPLIFICATION:**  
A standard system of classification, listing, packing, marking, labelling, placarding and documentation in general use.
-  **INTERNATIONAL TRANSPORT:**  
Obstacles to transport are reduced.



### INTERNATIONAL REGULATIONS AND AGREEMENTS ADR-ROAD



Most countries in **Europe, Scandinavia, the Baltic States and Russia**




European agreement concerning the international carriage of dangerous goods by road (ADR)




## Presentation Example Slides:

### GB DOMESTIC JOURNEYS

Significant differences:



PLACARDS



MARKS




PLATE MARKINGS

RTITB  
SETTING THE STANDARD

ASSIST

### INTERNATIONAL JOURNEYS

International operations/movements you must comply in full with the requirements of ADR

The journey is then exempt from national domestic rules

2 COUNTRIES = ADR



RTITB  
SETTING THE STANDARD

ASSIST

### THE MAIN HAZARDS OF SUBSTANCES IN CLASSES 2, 3, 4, 5, 6, 8 AND 9




RTITB  
SETTING THE STANDARD

ASSIST


## Presentation Example Slides:

### UN CLASSIFICATION


#### 9 CLASSES




BASED ON THE MAJOR DANGER



ALSO SUBSIDIARY RISKS




SOME SUB DIVIDED



UN/ADR

UN/ADR DETAILS CRITERIA FOR EACH OF THESE CLASSES



THE CLASS TELLS YOU THE NATURE OF THE DANGER

RTITB  
SETTING THE STANDARD

ASSIST

### SMALL LOAD CONCESSIONS

Allows movement without having to apply the full weight of ADR.  
Below the threshold limit the driver needs only:



DOCUMENTED TRAINING



A 2KG FIRE EXTINGUISHER



AN INTRINSICALLY SAFE TORCH




And if on an international journey a transport document  
(not required for UK domestic journeys)


RTITB  
SETTING THE STANDARD

ASSIST


### DECONTAMINATION PROCEDURES




CONTAMINATED PPE CAN CAUSE EXTENDED EXPOSURE




CROSS CONTAMINATION




SPECIFIC STRATEGIES FOR EACH SUBSTANCE



CONTAMINATED CLOTHING MUST BE ISOLATED



SEGREGATE IT



PLACE IT IN A CONTAINER FOR DECONTAMINATION LATER ON

RTITB  
SETTING THE STANDARD

ASSIST