



ADR Dangerous Goods Driver Training Qualifications

Tanks Specialisation Course

What is this unit about?

Drivers of vehicles or MEMUs carrying dangerous goods in fixed tanks or demountable tanks with a capacity exceeding 1m³, drivers of battery-vehicles with a total capacity exceeding 1m³ and drivers of vehicles or MEMUs carrying dangerous goods in tank containers, portable tanks or MEGCs with an individual capacity exceeding 3m³ on a transport unit, shall attend a Specialisation training course for carriage in tanks.

This Tanks Specialisation course does not cover any other aspect of the ADR courses.

What should I know or be able to do before I start?

It is anticipated that those undertaking this unit will have some relevant knowledge from working in the freight logistics industry.

What will I know or be able to do when I achieve this unit?

On successful completion of this unit, you should have sufficient knowledge to be able to effectively carry out your role as a driver of dangerous goods for carriage in tanks throughout the UK and Europe, as specified in the current ADR and Domestic Regulations.

In addition what is taught within this unit, your employer has a responsibility to ensure that you are familiar with the equipment you will be using which will often be specific to their operations. This will include full details and information relating to the tank(s) in use as well as the product(s) you will carry. See below 'responsibility of the employer'.

What does this involve?

Compulsory attendance on an approved 2 day training course will be required.

- ♦ A minimum of 10 x 45 minute Teaching units for initial candidates
- ♦ A minimum of 5 x 45 minute Teaching units for refresher candidates only

The minimum number of Teaching units for each course is generally aligned with the recommendations contained in Chapter 8.2 of the current edition of ADR. However, the ADR recommendation of a minimum of 12 Teaching units to cover the initial training for the carriage of dangerous goods in tanks has been reduced to 10 classroom-based Teaching units based on Industry comments.

Responsibility of the employer: The shortfall of two Teaching units is to be completed by the employer of the candidate providing on-the-job training relating to the specific aspects, technical equipment and operation of the carriage of dangerous goods in tanks.

How will this unit be delivered?

This unit will be delivered in accordance with the prescribed standards in a classroom environment with relevant class participation, together with the use of illustrative examples and visual aids. Physical examples of tanker equipment may also be used for illustrative purposes.

How will I show that I have achieved this unit?

This unit will be assessed by multiple-choice examination. You must achieve a minimum pass mark of 70%.

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.

What can I do next?

Progression routes may include further study towards Specialisation courses Class 1 and/or Class 7.

What will I have to do next?

Your **employer** must provide on-the-job training for the equivalent of two teaching units, relating to the specific aspects, technical equipment and operation of the carriage of dangerous goods in tanks relevant to employer's operations.

Undertake refresher training within the year before the date of expiry of any certificate issued if you wish to continue certification.

Further guidance

This unit is supported by the Department for Transport and HSENI Manual of Practice.



Administrative information

unit code: 002
unit title: Tanks
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Version: 1.3

History of changes

Version	Description of change	Date
1.1	Revision of assessment criteria and reformatting of document	
1.2	ADR unit review 2019.	November 2018
1.3	ADR unit review 2021	November 2020

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Guidance for instructors

All content detailed within the tables below must be taught.

Learning objective	Areas to be covered
T.1 The specific additional provisions applicable to the use of Tanks.	<p>T.1.1 The definitions of tanks and structural equipment as defined in 1.2 of ADR, in terms of construction and size.</p> <p>T.1.2 The responsibilities of employers to provide training on specific vehicles, equipment and mechanisms, and with specific loads.</p> <p>T.1.3 National and international requirements for tanks and vehicles to be inspected and certified. The documentation, plating of tanks and vehicles, and the information to be displayed on the data plate.</p> <p>T.1.4 The scope and applicability of national and international (ADR, IMDG, RID) requirements to the operation of tanks and tank containers.</p> <p>T.1.5 The requirements for vehicles to carry fire extinguishers and miscellaneous equipment.</p> <p>T.1.6 The requirement for vehicles to carry documentation, including Instructions in Writing, ADR Driver Training Certificate, transport document, and 'Certificate of Approval'.</p> <p>T.1.7 The safety precautions to be taken in the course of loading, unloading and during the journey, including segregation of loads, checks of the vehicle and load including the secure fastening of containers, and the use of any relevant equipment.</p> <p>T.1.8 The placarding and marking as required in accordance with Domestic regulations, ADR and IMDG.</p>

Learning objective	Areas to be covered
<p>T.2 The specific requirements of the vehicles.</p>	<p>T.2.1 The types of loads for which tanks may be designed, taking into account the physical state of the substance or mixture, temperature and pressure requirements.</p> <p>T.2.2 The materials from which tanks and tank containers may be constructed, including stainless steel, mild steel, aluminum, nickel, fibre reinforced plastic, and the various linings, which may be used.</p> <p>T.2.3 The construction of tanks and tank containers; atmospheric and pressure tanks, compartments and baffles.</p> <p>T.2.4 The construction and approval of tanks and tank vehicles to AT and FL requirements.</p> <p>T.2.5 The requirements for maximum and minimum filling ratios and ullage space.</p> <p>T.2.6 The significance of not exceeding the Maximum Allowable Working Pressure (MAWP) during loading and unloading procedures.</p> <p>T.2.7 The purpose, operation, precautions and drivers' responsibilities in relation to all service and safety equipment.</p>

Learning objective	Areas to be covered
T.3 The procedures to be followed in relation to the operation of tanks and tank containers.	T.3.1 Procedures at the loading point. T.3.2 Checks during the journey. T.3.3 Procedures at the unloading point. T.3.4 The causes and effects of Boiling Liquid Expanding Vapour Explosions (BLEVEs). T.3.5 The causes of static electricity, and the specific precautions to be taken. T.3.6 The avoidance of overloading and overfilling. T.3.7 The cleaning and purging of tanks and ancillary equipment. T.3.8 Using appropriate routes including tunnel codes.
Training note: This outcome may include a video clip or DVD on static electricity.	

Learning objective	Areas to be covered
T.4 Knowledge of the various and different filling and discharge systems	T.4.1 Advantages and disadvantages of open and closed filling. T.4.2 Top and bottom filling and discharging by gravity, pumps, pressure and vacuum operated (waste tanks) including the use of pumps or compressors, either on the vehicle or external to it. T.4.3 The use of and precautions to be taken whilst operating tipping tanks.
T.5 The behavior of vehicles, tankers and tank containers on the road, including movements of the load	T.5.1 Anticipation of product movement whilst cornering, braking and accelerating, and the need for the driver to adjust his driving techniques accordingly. T.5.2 The roles and limitations of baffles and rules on minimum loading ratios.
Training note: This outcome must include a suitable video clip or DVD on Rollovers mandatory for initial and refresher training courses.	

Table B — Practical Exercise

Learning objective	Areas to be covered
T.6 What to do in the case of an incident or accident.	<p>T.6.1 General actions ensuring personal safety</p> <p>T.6.2 Informing and cooperating with the emergency services</p> <p>T.6.3 Using Instruction in Writing and any other relevant documentation.</p> <p>T.6.4 Attending to the injured where relevant.</p> <p>T.6.5 Actions to be taken in the event of a fire.</p> <p>T.6.6 Prevent the escape and or containment of a spillage of dangerous goods.</p> <p>T.6.7 Reporting of injuries and dangerous occurrences to the relevant competent authorities via the carrier.</p>
Training note: This outcome to be achieved by a tanker exercise based on a written scenario completed individually. <i>(Mandatory for initial and refresher courses).</i>	