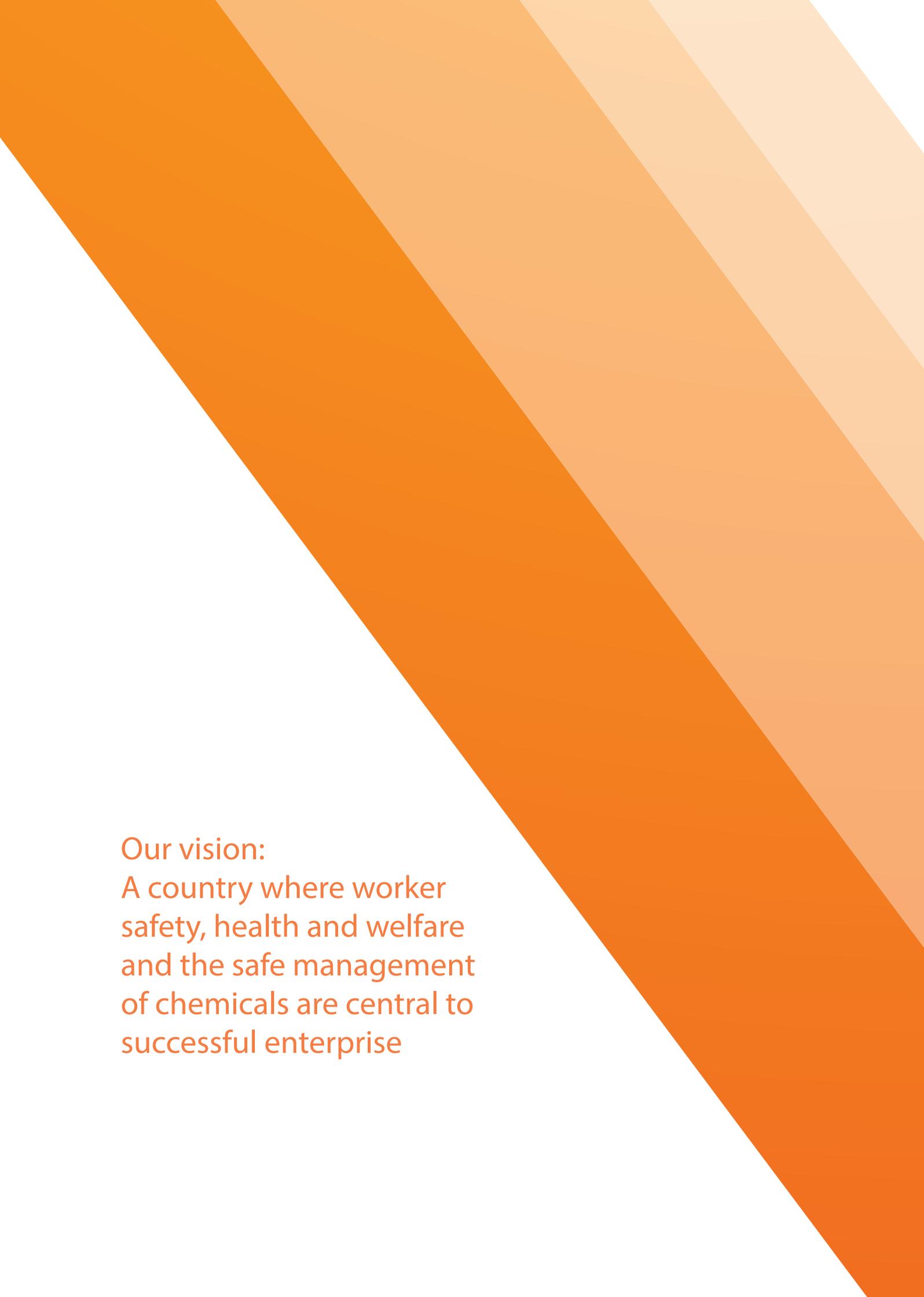


# Carriage of Asbestos-Containing Materials (ACMs) by Road





Our vision:

A country where worker safety, health and welfare and the safe management of chemicals are central to successful enterprise

## Contents

<b>1. Introduction</b> .....	4
<b>2. Classification of asbestos</b> .....	5
<b>3. Exemptions</b> .....	6
<b>3.1 Exempt material (special provision 168)</b> .....	6
<b>3.2 Carriage of asbestos under the small load exemption (ADR 1.1.3.6)</b> .....	8
<b>3.3 Carriage of asbestos in Limited Quantities (LQ)</b> .....	10
<b>4. ADR provisions applicable to ACMs</b> .....	11
<b>4.1 Packaging, labelling and marking</b> .....	11
<b>4.2 Vehicle equipment and marking</b> .....	12
<b>4.3 Documentation</b> .....	13
<b>4.4 Special provisions for carriage</b> .....	13
<b>5. Training of driver and vehicle crew</b> .....	14
<b>6. Additional information</b> .....	14

## 1. Introduction

[The Carriage of Dangerous Goods by Road and Transportable Pressure Equipment Regulations](#) and the European Agreement Concerning the International Carriage of Dangerous Goods by Road ([ADR](#)) provide the legal framework under which all dangerous goods, including asbestos, may be transported by road.

This document provides guidance and information to participants who are involved in the carriage of asbestos, mixtures containing asbestos and asbestos waste, which will generally be referred to as 'Asbestos-Containing Materials (ACMs)'. It should be used in conjunction with our [ADR Guide for Business](#), which was published in 2012 and provides general guidance in relation to the carriage of all dangerous goods. The ADR guide is referenced frequently throughout the document and provides detail on various general provisions which also apply to the carriage of ACMs.

If you are involved in the consignment, carriage, loading or unloading of ACMs, you may be required by law to obtain the services of a Dangerous Goods Safety Adviser (DGSA). For guidance on the appointment of a DGSA, and on the duties of a DGSA, please refer to our website at [DGSA Information - Health and Safety Authority](#). Even if you are not required to formally appoint a DGSA, we highly recommend that you seek advice as required from a DGSA, in relation to your own particular activities.

## 2. Classification of asbestos

ACMs belong to ADR Class 9, Miscellaneous Dangerous Substances and Articles, classification code M1. These are substances which on inhalation of fine dust may endanger health (ADR Chapter 2.2.9). The entries for ACMs in the ADR Dangerous Goods List (ADR Chapter 3.2) are provided in Table 1.

Table 1

Entries for asbestos in the ADR Dangerous Goods List (Chapter 3.2)

UN Number	Proper Shipping Name and Description	Packing Group
2212	ASBESTOS, AMPHIBOLE (amosite, tremolite, actinolite, anthophyllite, crocidolite)	II
2590	ASBESTOS, CHRYSOTILE	III

**Note:** Talc containing tremolite or actinolite is covered under UN No. 2590.

You may obtain classification information from the appropriate Safety Data Sheet for the substance or article or from the manufacturer's specification and safety information.

Raw and loose asbestos fibre, or certain articles containing asbestos (for example spray applications, textured coatings) will generally be classified as UN No. 2212 or UN No. 2590 as appropriate. However, asbestos in manufactured articles which is bound, immersed or fixed in a natural or artificial binder, may be exempted from the provisions of ADR under certain conditions (see Section 3 below).

If you need to classify asbestos it is recommended that you seek advice from a DGSA. For more detail on the classification of dangerous goods please refer to our [ADR Guide for Business](#), Chapter 7.

## 3. Exemptions

You may avail of various exemptions in ADR in relation to the carriage of asbestos and ACMs:

- Special provision 168 (ADR Chapter 3.3)
- Small load exemption (ADR 1.1.3.6)
- Limited quantities (ADR Chapter 3.4)

### 3.1 Exempt material (ADR special provision 168)

ADR Special Provision 168 (Chapter 3.3) exempts certain asbestos materials and articles from the provisions of ADR.

SP168:

‘Asbestos which is immersed or fixed in a natural or artificial binder (such as cement, plastics, asphalt, resins or mineral ore) in such a way that no escape of hazardous quantities of respirable asbestos fibres can occur during carriage is not subject to the requirements of ADR. Manufactured articles containing asbestos and not meeting this provision are nevertheless not subject to the requirements of ADR when packed so that no escape of hazardous quantities of respirable asbestos fibres can occur during carriage.’

The materials which may be transported under this special provision may be subdivided into friable and non-friable materials.

### A. Friable materials:

Friable materials must be carried with UN approved packaging suitable for the transport of asbestos, as provided in ADR 4.1.4, packing instructions P002, IBC08, PP37, B4 (and for UN No. 2590 only, packing instruction R001 also applies), or packaging of an equivalent standard.

When such packaging is used, no other requirements of ADR apply. However, you must mark all packages with an 'a' asbestos label in accordance with [REACH, Annex XVII, Appendix 7](#) (as provided in Figure 1).



Figure 1

Examples of friable materials:

- Thermal insulation on pipe work and vessels (composite and pre-formed, glass fibre with asbestos paper)
- Asbestos insulating board (density 700 kg/m<sup>3</sup>)
- Mill board (density less than 500 kg/m<sup>3</sup>)
- Textiles, ropes and paper

### B. Non-friable materials:

It is highly recommended to double bag or double wrap non-friable materials in heavy duty plastic. You should completely seal all openings with suitable adhesive tape or an alternative closure method. The package must be able to withstand normal handling and transport operations without opening or failing. When this is achieved there are no other ADR requirements.

However, as provided above in Figure 1, you must mark all packages with an 'a' asbestos label in accordance with [REACH, Annex XVII, Appendix 7](#).

Examples of non-friable material:

- Asbestos cement products in good condition
- 'Galbestos', which is bitumen layer on corrugated galvanized sheets
- Damp proof course
- Roofing felt
- Thermoplastic floor tiles
- Bitumen products (acoustic sink pads)
- Toilet cisterns
- Compressed gaskets in good condition
- Enclosed electrical fittings
- Putties, mastic and sealants
- WD Board - cellulose (wood) based board with trace amounts of chrysotile

**Note:** If the packaging used under this special provision has been poorly executed, has failed or has been torn open, the ACM must be examined for potential damage. If there are free fibres present, the asbestos must be classified as UN No. 2212 or UN No. 2590 as appropriate, and the provisions of ADR will apply in full.

### **3.2 Carriage of asbestos under the small load exemption (ADR 1.1.3.6)**

This exemption allows you to carry asbestos in packages up to a specified weight with minimal requirements imposed.

Depending on its classification, an ACM will belong to transport category 2 or 3. Each transport category has an assigned load limit or 'threshold' quantity as provided in Table 2.

Table 2

UN No.	Transport Category	Load Limit quantity (Kg)
2212	2	333
2590	3	1000

ACMs at or below the threshold quantities indicated above may be carried in packages in one transport unit **without the application** of various provisions of ADR. For details in relation this exemption, please refer to our [ADR Guide for Business](#), Section 5.2.

Requirements that **still apply** when availing of the small load exemption:

- Transport document must be carried (for details on what information is required see [ADR Guide for Business](#), Section 13.2)
- Vehicle must be equipped with a suitable 2Kg fire extinguisher
- Driver and crew must have received appropriate general awareness training
- Driver and crew must not open the packages
- There must be no smoking during handling in or around the vehicle
- Any torch must be non-sparking

**Note 1:** The total quantity of dangerous goods for **each transport category** must be indicated in the transport document.

**Note 2:** Tunnel restriction code E applies to UN No. 2212 and UN No. 2590. However, tunnel restrictions do not apply under this exemption.

If transporting asbestos in quantities above the load limit thresholds, you must comply in full with the provisions of ADR as set out later in this guidance.

### 3.3 Carriage of asbestos in Limited Quantities (LQ)

You can carry ACMs in specified small packaged quantities with minimal requirements applying, as provided in ADR chapter 3.4. The specified quantities for each type of asbestos are provided in Table 3.

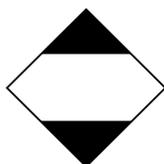
Table 3

UN No.	Combination Package	Shrink Wrapped Tray
2212	Maximum of <b>1Kg</b> per inner packaging with a gross mass limit of 30Kg	Maximum of <b>1Kg</b> per inner packaging with a gross mass limit of 20Kg
2590	Maximum of <b>5Kg</b> per inner packaging with a gross mass limit of 30Kg	Maximum of <b>5Kg</b> per inner packaging with a gross mass limit of 20Kg

LQ packaging does not need to be UN approved packaging but must be of good quality and fit for purpose. Packages must be marked in accordance with ADR 3.4.7, as indicated in Figure 2.

Figure 2

Road/Rail/Sea mark



Air



For further details in relation to the provisions which do and do not apply under this exemption, please refer to our [ADR Guide for Business](#), Section 5.4.

## 4. ADR provisions applicable to ACMs

This section provides guidance in relation to the ADR provisions applicable to the carriage of asbestos that does not qualify under any of the exemptions outlined in Section 3.

### 4.1 Packaging, labelling and marking

Provisions concerning packaging and labelling apply to all quantities above the LQ thresholds (1Kg for UN No. 2212 and 5Kg for UN No. 2590).

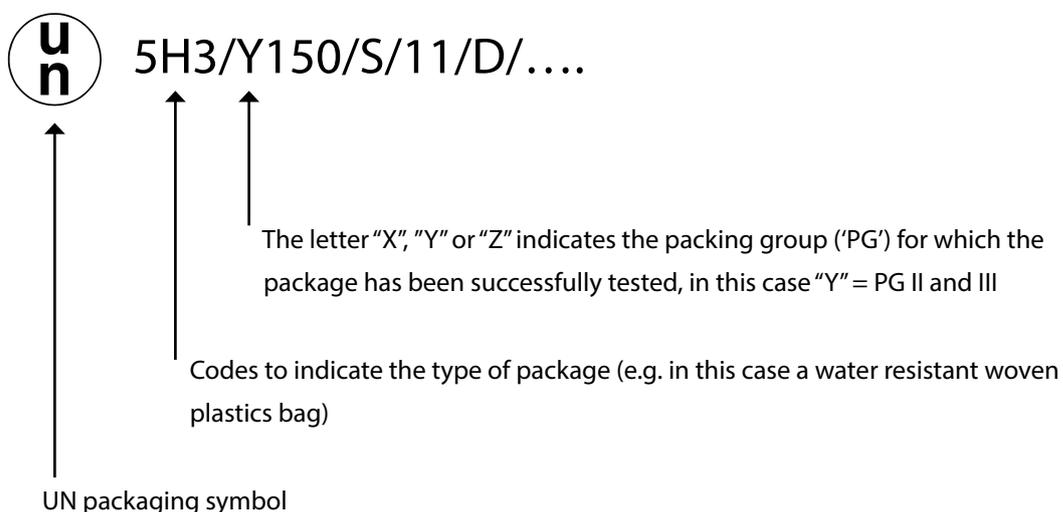
Asbestos may be packaged in a wide variety of UN approved packaging types such as, boxes, bags, drums and intermediate bulk containers (IBCs). Full details are provided in ADR Chapter 4.1, and specifically in packing instructions P002 and IBC08 (and R001 for UN No. 2590). It is recommended to seek advice from a DGSA in relation to the most suitable packaging to use.

**Note 1:** 5M1 bags are permitted for UN 2212 & UN 2590 under packing provision PP37. The 5M1 code indicates the type of packaging, in this case a multiwall paper bag.

**Note 2:** If flexible, fibreboard or wooden IBCs are used (under packing instruction IBC08), they must be sift-proof and water-resistant or alternatively must be fitted with a sift-proof and water-resistant liner (special packing provision B4).

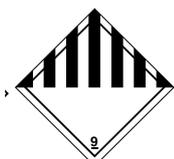
Packaging must be marked with a code preceded by the UN packaging symbol (Figure 3).

**Figure 3**



Each package must bear the Class 9 hazard label (Figure 4) and adjacent to it, the appropriate UN number.

**Figure 4**



Intermediate bulk containers of more than 450L capacity and large packagings must be marked on two opposite sides.

All packages must be marked with the asbestos 'a' warning label (Figure 1) in accordance with [REACH, Annex XVII, Appendix 7](#).

**Note:** Mixed packaging provision MP10 (ADR 4.1.10) applies to all ACMs when packaged in combination packaging, with inner packaging limited to 5Kg per package.

**Important note:** ACMs may not be transported in 'bulk', as loose, unpackaged material.

For more detailed information and guidance in relation to the packaging, marking and hazard labelling of dangerous goods, please refer to our [ADR Guide for Business](#), Section 8.

#### **4.2 Vehicle equipment and marking**

Vehicles carrying dangerous goods above the threshold quantity limit of the small load exemption (Section 3.2, Table 2) must be marked and labelled (with 'placards' when necessary) and must carry certain mandatory vehicle safety equipment, personal protective equipment and fire-fighting equipment. For details in relation to vehicle marking, labelling and the equipment required, please refer to our [ADR Guide for Business](#), Sections 9 and 11.

### 4.3 Documentation

The documents which must be carried on the transport unit are listed in the [ADR Guide for Business](#), Sections 13, and detailed guidance is provided in relation to what must be included in the transport document, large container or vehicle packing certificate and instructions in writing.

If transporting waste, the word “waste” shall precede the description of dangerous goods on the transport document. For example, the dangerous goods description for waste chrysotile asbestos will be:

“WASTE, UN2590, ASBESTOS, CHRYSOTILE, 9, PGIII, (E)”

Note that forms such as the Waste Transfer Form (national transport only), when used, may take the place of the transport document for the movement of hazardous waste as long as the appropriate information is recorded.

### 4.4 Special provisions for carriage

Particular special provisions for the carriage of ACMs are as follows:

- All IBC's other than metal or rigid plastics IBC's shall be carried in closed or sheeted vehicles or closed or sheeted containers (ADR 7.2.4, V11)
- If any ACMs is leaked or has been spilled in a vehicle or container, it may not be re-used until after it has been thoroughly cleaned. Any other goods and articles carried in the same vehicle or container must be examined for possible contamination (ADR 7.5.11, CV13)
- There are particular precautions with respect to foodstuffs, animal feeds and other articles of consumption (see ADR 7.5.11, CV28 and ADR 7.5.4)

Particular special provisions for the carriage of UN No. 2212, ASBESTOS, AMPHIBOLE, are as follows:

- The provisions of ADR Chapter 8.4 concerning the supervision of vehicles apply when the total mass of the ACMs in the vehicle exceeds 5,000 Kg
- There are restrictions in relation to loading and unloading operations in a public place (ADR 7.5.11, CV1). However, there is a standing special permission from the Competent Authority for this activity in our [national regulations](#) [Regulation 57 (c)]

## 5. Training of driver and vehicle crew

For details on the training required for the driver and vehicle crew, including general awareness training, function specific training and safety and security training, please refer to our [ADR Guide for Business](#), Section 6.

For quantities carried in excess of the various exemption threshold limits, the driver must also carry an ADR Driver Training Certificate. You can find further information on driver training on the HSA webpages at [Training - Driver & Vehicle Crew - Health and Safety Authority](#)

## 6. Additional information

For further information in relation to asbestos please refer to our web pages at [Asbestos - Health and Safety Authority](#) and in particular, detailed guidelines on the [management and abatement of Asbestos-Containing Materials \(ACMs\)](#) in the workplace.



*A country where  
worker safety, health  
and welfare and  
the safe management  
of chemicals are  
central to successful  
enterprise*

**HEALTH AND SAFETY  
AUTHORITY**

**Tel. 1890 289 389**

International  
Callers

00353 1 6147000

[www.hsa.ie](http://www.hsa.ie)

