
Economic Commission for Europe**Inland Transport Committee****Working Party on the Transport of Perishable Foodstuffs****24 September 2012****Sixty-eighth session**

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Item 11 of the provisional agenda

Other business

New ADR provisions related to coolants**Note by the secretariat**

The following new section has been added to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) and will become applicable from 1 January 2013.

5.5.3 Special provisions applicable to packages and vehicles and containers containing substances presenting a risk of asphyxiation when used for cooling or conditioning purposes (such as dry ice (UN 1845) or nitrogen, refrigerated liquid (UN 1977) or argon, refrigerated liquid (UN 1951))

5.5.3.1 Scope

5.5.3.1.1 This section is not applicable to substances which may be used for cooling or conditioning purposes when carried as a consignment of dangerous goods. When they are carried as a consignment, these substances shall be carried under the relevant entry of Table A in Chapter 3.2 in accordance with the associated conditions of carriage.

5.5.3.1.2 This section is not applicable to gases in cooling cycles.

5.5.3.1.3 Dangerous goods used for cooling or conditioning tanks or MEGCs during carriage are not subject to this section.

5.5.3.2 General

5.5.3.2.1 Vehicles and containers containing substances used for cooling or conditioning purposes (other than fumigation) during carriage are not subject to any provisions of ADN other than those of this section.

5.5.3.2.2 When dangerous goods are loaded in cooled or conditioned vehicles and containers any provisions of ADN relevant to these dangerous goods apply in addition to the provisions of this section.

5.5.3.2.3 (*Reserved*)

5.5.3.2.4 Persons engaged in the handling or carriage of cooled or conditioned vehicles and containers shall be trained commensurate with their responsibilities.

5.5.3.3 *Packages containing a coolant or conditioner*

5.5.3.3.1 Packaged dangerous goods requiring cooling or conditioning assigned to packing instructions P203, P620, P650, P800, P901 or P904 of 4.1.4.1 of ADR shall meet the appropriate requirements of that packing instruction.

5.5.3.3.2 For packaged dangerous goods requiring cooling or conditioning assigned to other packing instructions, the packages shall be capable of withstanding very low temperatures and shall not be affected or significantly weakened by the coolant or conditioner. Packages shall be designed and constructed to permit the release of gas to prevent a build-up of pressure that could rupture the packaging. The dangerous goods shall be packed in such a way as to prevent movement after the dissipation of any coolant or conditioner.

5.5.3.3.3 Packages containing a coolant or conditioner shall be carried in well ventilated vehicles and containers.

5.5.3.4 *Marking of packages containing a coolant or conditioner*

5.5.3.4.1 Packages containing dangerous goods used for cooling or conditioning shall be marked with the name indicated in Column (2) of Table A of Chapter 3.2 of these dangerous goods followed by the words "AS COOLANT" or "AS CONDITIONER" as appropriate in an official language of the country of origin and also, if that language is not English, French or German, in English, French or German, unless agreements concluded between the countries concerned in the transport operation provide otherwise.

5.5.3.4.2 The markings shall be durable, legible and placed in such a location and of such a size relative to the package as to be readily visible.

5.5.3.5 *Vehicles and containers containing unpackaged dry ice*

5.5.3.5.1 If dry ice in unpackaged form is used, it shall not come into direct contact with the metal structure of a vehicle or container to avoid embrittlement of the metal. Measures shall be taken to provide adequate insulation between the dry ice and the vehicle or container by providing a minimum of 30 mm separation (e.g. by using suitable low heat conducting materials such as timber planks, pallets etc).

5.5.3.5.2 Where dry ice is placed around packages, measures shall be taken to ensure that packages remain in the original position during carriage after the dry ice has dissipated.

5.5.3.6 *Marking of vehicles and containers*

5.5.3.6.1 Vehicles and containers containing dangerous goods used for cooling or conditioning shall be marked with a warning mark, as specified in 5.5.3.6.2 affixed at each access point in a location where it will be easily seen by persons opening or entering the vehicle or container. This mark shall remain on the vehicle or container until the following provisions are met:

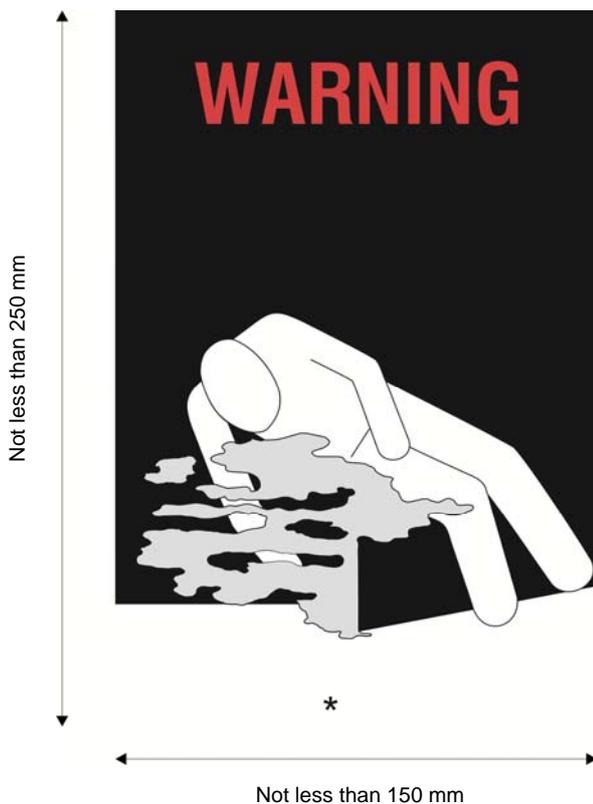
- (a) The vehicle or container has been ventilated to remove harmful concentrations of coolant or conditioner; and
- (b) The cooled or conditioned goods have been unloaded.

5.5.3.6.2 The warning mark shall be rectangular and shall not be less than 150 mm wide and 250 mm high. The warning mark shall include:

- (a) The word "WARNING" in red or white with lettering not less than 25 mm high in an official language of the country of origin and also, if that language is not English, French or German, in English, French or German, unless agreements concluded between the countries concerned in the transport operation provide otherwise; and
- (b) The name indicated in Column (2) of Table A of Chapter 3.2 followed by the words "AS COOLANT" or "AS CONDITIONER" as appropriate, shown below the symbol in black letters on a white background with lettering not less than 25 mm high in an official language of the country of origin and also, if that language is not English, French or German, in English, French or German, unless agreements concluded between the countries concerned in the transport operation provide otherwise.

For example: CARBON DIOXIDE, SOLID, AS COOLANT.

An illustration of this mark is given below.



* Insert the name indicated in Column (2) of Table A of Chapter 3.2 followed by the words "AS COOLANT" or "AS CONDITIONER" as appropriate.

5.5.3.7 Documentation

5.5.3.7.1 Documents (such as a bill of lading, cargo manifest or CMR/CIM/CMNI consignment note) associated with the carriage of vehicles or containers that have been cooled or conditioned and have not been completely ventilated before carriage shall include the following information:

- (a) The UN number preceded by the letters "UN"; and
- (b) The name indicated in Column (2) of Table A of Chapter 3.2 followed by the words "AS COOLANT" or "AS CONDITIONER" as appropriate in an official language of the country of origin and also, if that language is not English, French or German, in English, French or German, unless agreements, if any, concluded between the countries concerned in the transport operation provide otherwise.

For example: UN 1845, CARBON DIOXIDE, SOLID, AS COOLANT.

5.5.3.7.2 The transport document may be in any form, provided it contains the information required in 5.5.3.7.1. This information shall be easy to identify, legible and durable.