

**Multilateral Agreement M221**

according to section 1.5.1 of ADR on the carriage of vehicle fuel gas tanks or vehicle fuel gas storage systems containing gases of UN Nos. 1011, 1049, 1075, 1954, 1965, 1966, 1969, 1971 or 1978

- (1) By derogation from the provisions of Chapter 3.2, table A, Chapter 3.3, subsection 4.1.4.1, Chapter 5 and Chapter 6.2 of ADR, vehicle fuel gas tanks or vehicle fuel gas storage systems containing gases of UN Nos. 1011, 1049, 1075, 1954, 1965, 1966, 1969, 1971 or 1978 may be carried, provided the following conditions are met:
- (a) The vehicle fuel gas tank or vehicle fuel gas storage systems shall be approved for operation in motor vehicles in accordance with the applicable provisions and meet the requirements of the relevant ECE Regulation No. R 67, R 110 or R 115 or the Regulations of the European Union concerning hydrogen vehicles.
  - (b) The vehicle fuel gas tanks or vehicle fuel gas storage systems, and any fittings, shall be leakproof and shall not exhibit any signs of external damage.
  - (c) If the receptacles are not leakproof or if they exhibit damage that could affect their safety, they shall only be carried in pressure-resistant containments approved by the competent authority as packaging for cylinders or tubes of a capacity and test pressure of not less than the capacity and 150% of the working pressure of the vehicle fuel gas tanks or vehicle fuel gas storage systems. In the case of liquefied gases, the containment shall be approved for a test pressure of not less than the test pressure stipulated for the stored gas in packing instruction P200 in subsection 4.1.4.1 of ADR.
  - (d) All openings, with the exception of pressure relief devices, shall be so closed as to be gas-tight.
  - (e) During carriage, the filling quantity in the vehicle fuel gas tanks or vehicle fuel gas storage systems shall not exceed the maximum allowable working pressure at 15 °C or the filling ratio as given in P200.
  - (f) Vehicle fuel gas tanks or vehicle fuel gas storage systems with or without other pressurised external attachments shall be packed individually or together in such a way as to prevent any damage to the tank and the valve and unintentional release of the gas under normal conditions of carriage.
  - (g) Vehicle fuel gas tanks or vehicle fuel gas storage systems with an internal valve shall fulfil the provisions of 4.1.6.8 (a).
  - (h) Vehicle fuel gas tanks or vehicle fuel gas storage systems with external valves or with pressurised external attachments shall be carried under one of the conditions of 4.1.6.8 (b), (c), (d) or (e).
  - (i) The marking and labelling provisions of ADR have to be fulfilled, unless several vehicle fuel gas tanks or vehicle fuel gas storage systems are consigned in a pallet cage, on a load carrier, in a protective frame or on a pallet. If so, the markings and danger labels required in accordance with Chapter 5.2 need to be affixed to the packing unit.
  - (j) Documentation  
Every consignment that is carried in accordance with this Multilateral Agreement must be accompanied by a transport document in accordance with ADR 5.4.1, containing at least the following information:
    - (i) the UN number of the gas contained in the vehicle fuel gas tanks or vehicle fuel gas storage systems, preceded by the letters "UN";
    - (ii) proper shipping name of the gas;
    - (iii) the label model number;
    - (iv) quantity and description of the vehicle fuel gas tanks or vehicle fuel gas storage systems;
    - (v) the water capacity of each vehicle fuel gas tank or, in the case of vehicle fuel gas storage systems, the water capacity of each individual tank;
    - (vi) the names and the addresses of the consignor and the consignee;

(i) to (v) shall appear according to the example:

Example: "UN 1971 natural gas, compressed, 2.1, 1 vehicle fuel gas storage system of 50 l, 2 tanks of 25 l, M221".

(k) The other provisions of ADR shall be observed.

- (2) In addition to the prescribed details, the consignor shall note in the transport document:  
"Carriage agreed according to section 1.5.1 of ADR (M221)".
- (3) This agreement shall be valid until 31 December 2012 for the carriage on the territories of those ADR Contracting Parties signatory to this agreement. If it is revoked before then by one of the signatories, it shall remain valid until the above mentioned date only for carriage on the territories of those ADR Contracting Parties signatory to this agreement which have not revoked it.