

## Multilateral Agreement M302

### under section 1.5.1 of ADR concerning the carriage of MAGNESIUM HYDRIDE in transportable hydrogen storage systems

1. By derogation from the provisions of Chapters 4.1 and 6.2, MAGNESIUM HYDRIDE, may be carried in transportable hydrogen storage systems under UN No. 2010, provided the following conditions are met.
2. The system shall not contain free hydrogen at temperatures lower than 280°C.
3. The storage system shall be a solid bundle constituted of cylinders, containing the magnesium hydride, assembled in a block with screwed links.

The collector shall be constituted of:

- inox piping connecting cylinders together,
- an inox flexible hose constituting a main collector,
- a bursting disc set to rupture at a pressure of 15.5 bar,
- two isolation valves and a quick coupling connection with check valve in the end of the flexible hose.

The bursting disc, the two isolation valves and the quick coupling are integrated into a protective box.

The bundle shall be certified according to directive 97/23/EC or directive 2014/68/EU, and EN 13480.

4. Each cylinder shall be:
  - certified according to directive 97/23/EC or directive 2014/68/EU, and EN 13445;
  - capable of successfully pass a 1,8 m drop test as demonstrated by a design type test on the longitudinal welding;
  - capable of successfully pass a 2000 kg stacking test for 24 hours as demonstrated by a design type test.
5. Transport parameters:
  - transport temperature (°C) -20 / +50
  - transport pressure (barG) < 0,5.
6. All other relevant provisions of ADR shall be complied with.
7. The consignor shall enter in the transport document "Carriage agreed under the terms of section 1.5.1 of ADR (M302)".
8. This agreement shall be valid until 31 December 2019 for the carriage on the territories of those ADR Contracting Parties signatory to this Agreement. If it is revoked before that date 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.

Done in Paris on 19 July 2016

The competent authority for ADR in France,

Pour la ministre et par délégation,  
L'ingénieur en chef des mines

  
Nicolas CHANTRENNE