

## Economic Commission for Europe

### Inland Transport Committee

#### Working Party on the Transport of Dangerous Goods

##### Ninety-ninth session

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Item 4 of the provisional agenda

##### Interpretation of ADR

5 November 2015

### Construction of EX/III load compartments

#### Transmitted by the Government of the Netherlands

Explosives are vulnerable to high temperatures. A surface temperature of the load area of 150 °C is regarded as a safe upper limit. Metal is a heat conductor and a fire on the outside of the compartment will quickly exceed this surface temperature inside.

For this reason the Netherlands is of the opinion that metal parts in an EX/III load compartment, that form a heat bridge from the outside to the inside, should be clad with material that decreases the surface temperature. Although a thermal insulation is no longer prescribed directly in 9.3.4.2, but the intention can still be seen in the last sentence of the subsection. The last sentence reads that *“if the material used for the body is metal the complete inside of the body shall be covered with materials fulfilling the same requirements”*.

However, because metal can pass the tests of the standard EN 13501-1, *“fulfilling the same requirements”* is interpreted that exposed metal parts fulfil the requirement.

The standard EN 13501-1 requires basically two tests to be done for the determination of the burning behavior of the material. In one test the material is ignited by a flame on the edge of a test plate and in the other test the material is exposed to a flame in a furnace where the additional energy released by the burning material is measured. On the basis of these two tests the burning behavior of the material is determined. If a single steel or aluminum alloy plate is put to these tests there will be no ignition and no additional energy release.

WP.15 is asked to confirm the intention of subsection 9.3.4.2 of an internal covering of a metal body and parts with a layer of wood or comparable insulating material that complies with the burning behavior of the required class of the referenced standard.

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