

Proposal for draft amendments to Regulation No. 118 (Burning behaviour of Materials)

Note: This document amends document ECE/TRANS/WP.29/GRSG/2009/14.

A. PROPOSAL

Paragraph 6.2.5., amend to read:

All insulation material(s) and composite material(s) installed in the engine compartment and any separate heating compartment shall undergo the test described in Annex 9 to this Regulation.

The result of the test shall be considered satisfactory if, taking the worst test results into account, the ~~increase of the weight of the test sample does not exceed 1 g. amount of absorbed test liquid is equal or less than [10] g/m².~~

Recesses necessary for technical reasons, e.g. tubes or structural members that need to pass through the material shall be allowed as long as the protection is maintained (e.g. sealant, tape ...).

Annex 9

Paragraph 2.2., amend to read:

The thickness of the samples shall be 5mm. If the thickness of the test sample is more than 5 mm, it shall be reduced to 5 mm by a mechanical process applied to the side which does not face the engine compartment or separate heating compartment.

Insert a new Paragraph 2.3., to read:

The test liquid shall be diesel fuel according to standard EN 590:1999 (Market Fuels) or alternatively diesel fuel according to ECE regulation no. 83 (Annex 10: "Specification of Reference Fuels").

Paragraph 2.2., to be renumbered as Paragraph 2.4

Paragraph 3., amend to read:

Apparatus (see figure 4)

The apparatus shall consist of:

A ~~a base plate with an~~ absorbant surface **on the base plate (e.g. paper);**

- B** a metal cylinder (inner diameter of 120 mm, outer diameter of 130 mm, height of 50 mm), filled with the test liquid;
- C - C`** two screws with wing nuts;
- D** the test sample;
- E** a seal **base** plate, with a hardness of **at least** 70 Shore D.

Paragraph 4., amend to read:

4. Procedure

- 4.1. The test sample and the apparatus shall be conditioned for at least 24 hours at a temperature of **[23]** $18^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and a relative humidity of 50 ± 5 per cent and shall be maintained under these conditions until immediately prior to testing.
- 4.2 The test sample shall be weighed.
- 4.3 The test sample, with its exposed face uppermost, shall be placed on the base of the apparatus by fixing the metal cylinder in a centred position with sufficient pressure on the screws. No test liquid shall leak.
- 4.4 Fill the metal cylinder with test liquid (~~fuel and/or lubricant~~) to a height of 20 mm and let the system rest for 24 hours.
- 4.5 Remove the test liquid, ~~wipe~~ **The surface of the test specimen shall be cleaned from adhesive components of the test liquid** without pressing.
- 4.6 The test sample shall be weighed.

B. JUSTIFICATION

The proposed amendments to document ECE/TRANS/WP.29/GRSG/2009/14 are an improvement with regard to the test procedure of Annex 9 “TEST TO DETERMINE THE CAPABILITY OF MATERIALS TO REPEL FUEL OR LUBRICANT”.

As proposed during the 96th GRSG session the test liquid that shall be used for the Repel Test is Diesel fuel.

As the limit of 10 g/m² for the increased weight of the test sample is for practical circumstances hardly not measurable, the limit for the increased weight of the test sample was adopted to 1 g.

The ambient temperature at which the test shall be performed was adopted to 23°C, as this is the normal temperature at which most laboratories are running the approval tests regarding the burning behaviour of materials.

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