



## Economic and Social Council

Distr.: General  
29 December 2014

Original: English

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### Economic Commission for Europe

#### Inland Transport Committee

#### World Forum for Harmonization of Vehicle Regulations

##### 165<sup>th</sup> session

Geneva, 10-13 March 2015

Item 4.9.19 of the provisional agenda

**1958 Agreement – Consideration of draft amendments  
to existing Regulations submitted by GRE**

### **Proposal for Supplement 7 to the 01 series of amendments to Regulation No. 123 (Adaptive front lighting systems (AFS))**

#### **Submitted by the Working Party on Lighting and Light-Signalling\***

The text reproduced below was adopted by the Working Party on Lighting and Light-Signalling (GRE) at its seventy-second session (ECE/TRANS/WP.29/GRE/72, para. 42). It is based on based on based on ECE/TRANS/WP.29/GRE/2014/28, as amended by paragraph 42 of the report. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration.

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\* In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

*Annex 4, paragraph 1.2.1.*, amend to read (including the insertion of a new footnote <sup>6</sup>):

- "1.2.1. Preparation of the test sample
- Test mixture
- 1.2.1.1. For a system or parts thereof with the outside lens in glass, a mixture of water and polluting agent to be applied to the test sample shall be composed of:
- 9 parts by weight of silica sand with a particle size of 0-100 micro meter;
  - 1 part by weight of vegetable carbon dust produced from beech wood with a particle size of 0-100 micro meter;
  - 0.2 parts by weight of NaCMC<sup>5</sup>; and
  - 5 parts by weight of sodium chloride (pure at 99 per cent);
- an appropriate quantity of distilled water with a conductivity of less than 1 µS/m.
- 1.2.1.2. For a system or parts thereof with the outside lens in plastic material, the mixture of water and polluting agent to be applied to the test sample shall be composed of:
- 9 parts by weight of silica sand with a particle size of 0-100 micro meter;
  - 1 part by weight of vegetable carbon dust produced from beech wood with a particle size of 0-100 micro meter;
  - 0.2 parts by weight of NaCMC<sup>5</sup>;
  - 5 parts by weight of sodium chloride (pure at 99 per cent);
  - 13 parts by weight of distilled water with a conductivity of less than 1 µS/m;
- and
- 2 + 1 parts by weight of surface-actant.<sup>6</sup>

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<sup>6</sup> The tolerance on quantity is due to the necessity of obtaining dirt that correctly spreads out on all types of plastic lens."

*Paragraph 1.2.1.3.*, shall be deleted.

*Paragraphs 1.2.1.4. and 1.2.1.5.*, to renumber as paragraphs 1.2.1.3. and 1.2.1.4.

Annex 11, paragraph 4.2., Table UV, amend to read:

"Table UV

Values according to "IRPA/INIRC Guidelines on limits of exposure to ultraviolet radiation".  
Wavelengths (in nanometres) chosen are representative; other values should be interpolated.

$\lambda$	S( $\lambda$ )	$\lambda$	S( $\lambda$ )	$\lambda$	S( $\lambda$ )
250	0.430	305	0.060	355	0.000 16
255	0.520	310	0.015	360	0.000 13
260	0.650	315	0.003	365	0.000 11
265	0.810	320	0.001	370	0.000 09
270	1.000	325	0.000 50	375	0.000 077
275	0.960	330	0.000 41	380	0.000 064
280	0.880	335	0.000 34	385	0.000 053
285	0.770	340	0.000 28	390	0.000 044
290	0.640	345	0.000 24	395	0.000 036
295	0.540	350	0.000 20	400	0.000 030
300	0.300				

"

Annex 11, paragraph 5.2., amend to read:

"5.2. One module of each type shall be submitted by the applicant with the light source control gear, if applicable, and sufficient instructions.

Suitable thermal management (e.g. heat sink) may be provided, to simulate similar thermal conditions as in the corresponding headlamp application.

Before the test the LED module shall be aged at least for seventy-two hours under the same conditions as in the corresponding headlamp application.

In the case of use of an integrating sphere, the sphere shall have a minimum diameter of one meter, and at least ten times the maximum dimension of the LED module, whichever is the largest. The flux measurements can also be performed by integration using a goniophotometer. The prescriptions in CIE – Publication 84 - 1989, regarding the room temperature, positioning, etc., shall be taken into consideration.

The LED module shall be burned in for approximately one hour in the closed sphere or goniophotometer.

The flux shall be measured after stability has occurred, as explained in paragraph 4.3.1.2. of this annex."