

Commission Regulation (EC) No 692/2008 of 18 July 2008 implementing and amending Regulation (EC) No 715/2007 of the European Parliament and of the Council on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information (Text with EEA relevance)

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**Changes to legislation:** *There are currently no known outstanding effects for the Commission Regulation (EC) No 692/2008, ANNEX IV. (See end of Document for details)*

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## ANNEX IV

### EMISSIONS DATA REQUIRED AT TYPE- APPROVAL FOR ROADWORTHINESS PURPOSES

## Appendix 1

### MEASURING CARBON MONOXIDE EMISSION AT IDLING SPEEDS

#### (TYPE 2 TEST)

#### 1. INTRODUCTION

- 1.1. This appendix describes the procedure for the type 2 test, measuring carbon monoxide emissions at idling speeds (normal and high).

#### 2. GENERAL REQUIREMENTS

- 2.1. The general requirements shall be those specified in paragraphs 5.3.7.1 to 5.3.7.4 of UN/ECE Regulation 83, with the exceptions set out in sections 2.2, 2.3 and 2.4.

- [<sup>F1</sup>2.2. The atomic ratios specified in point 5.3.7.3 shall be understood as follows:

Hcv	=	Atomic ratio of hydrogen to carbon
	—	for petrol (E5) 1,89
	—	for petrol (E10) 1,93
	—	for LPG 2,53
	—	for NG/biomethane 4,0
	—	for ethanol (E85) 2,74
	—	for ethanol (E75) 2,61
Ocv	=	Atomic ratio of oxygen to carbon
	—	for petrol (E5) 0,016
	—	for petrol (E10) 0,033
	—	for LPG 0,0
	—	for NG/biomethane 0,0
	—	for ethanol (E85) 0,39
	—	for ethanol (E75) 0,329]

#### **Textual Amendments**

- F1** Substituted by [Commission Regulation \(EU\) No 136/2014 of 11 February 2014 amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation \(EC\) No 692/2008 as regards emissions from light passenger and commercial vehicles \(Euro 5 and Euro 6\) and Commission Regulation \(EU\) No 582/2011 as regards emissions from heavy duty vehicles \(Euro VI\) \(Text with EEA relevance\).](#)

- 2.3. The table in section 2.2 of Appendix 4 to Annex I to this Regulation shall be completed on the basis of the requirements set out in sections 2.2 and 2.4 of this Annex.

- 2.4. The manufacturer shall confirm the accuracy of the Lambda value recorded at the time of type-approval in paragraph 2.1 of this Appendix as being representative of typical production vehicles within 24 months of the date of the granting of type-approval by the technical service. An assessment shall be made on the basis of surveys and studies of production vehicles.

#### 3. TECHNICAL REQUIREMENTS

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- 3.1. The technical requirements shall be those set out in Annex 5 to UN/ECE Regulation No 83, with the exceptions set out in section 3.2.
- 3.2. The reference fuels specified in paragraph 2.1 of Annex 5 to UN/ECE Regulation No 83 shall be understood as referring to the appropriate reference fuel specifications in Annex IX to this Regulation.

## Appendix 2

### MEASUREMENT OF SMOKE OPACITY

#### 1. INTRODUCTION

1.1. This Appendix describes the requirements for measuring the opacity of exhaust emissions.

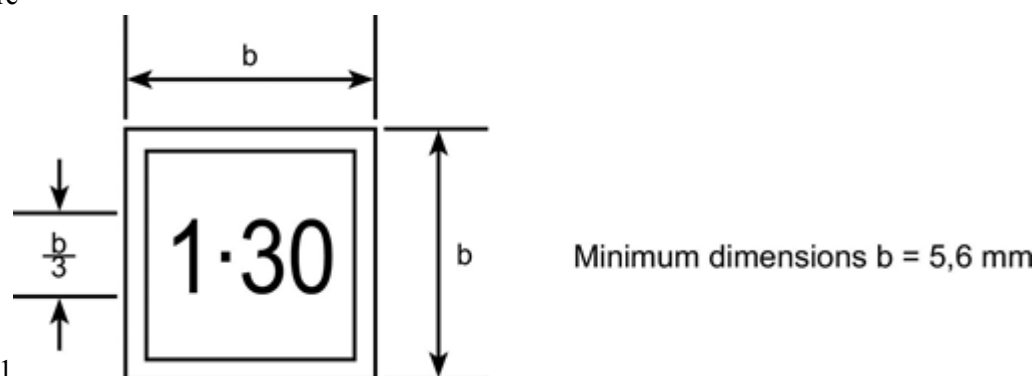
#### 2. SYMBOL OF THE CORRECTED ABSORPTION COEFFICIENT

2.1. A symbol of the corrected absorption coefficient shall be affixed to every vehicle conforming to a vehicle type to which this test applies. The symbol shall be a rectangle surrounding a figure expressing in  $\text{m}^{-1}$  the corrected absorption coefficient obtained, at the time of approval, from the test under free acceleration. The test method is described in section 4.

2.2. The symbol shall be clearly legible and indelible. It shall be fixed in a conspicuous and readily accessible place, the location of which shall be specified in the Addendum to the type-approval certificate shown in Appendix 4 to Annex I.

2.3. Figure IV.2.1 gives an example of the symbol.

Figure



The above symbol shows that the corrected absorption coefficient is  $1,30 \text{ m}^{-1}$ .

#### 3. SPECIFICATIONS AND TESTS

3.1. The specifications and tests shall be those set out in Part III, section 24, of UN/ECE Regulation No 24, with the exception to these procedures set out in section 3.2.

3.2. The reference to Annex 2 in paragraph 24.1 of UN/ECE Regulation No 24 shall be understood as a reference to Appendix 2 to Annex X to this Regulation.

#### 4. TECHNICAL REQUIREMENTS

4.1. The technical requirements shall be those set out in Annexes 4, 5, 7, 8, 9 and 10 to UN/ECE Regulation No 24, with the exceptions set out in sections 4.2., 4.3 and 4.4.

4.2. Test at steady speeds over the full load curve

4.2.1. The references to Annex 1 in paragraph 3.1. of Annex 4 of UN/ECE Regulation No 24 shall be understood as references to Appendix 3 to Annex I to this Regulation.

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- 4.2.2. The reference fuel specified in paragraph 3.2 of Annex 4 of UN/ECE Regulation No 24 shall be understood as reference to the reference fuel in Annex IX to this Regulation appropriate to the emission limits against which the vehicle is being type approved.
- 4.3. Test under free acceleration
  - 4.3.1. The references to Table 2, Annex 2 in paragraph 2.2 of Annex 5 to UN/ECE Regulation No 24 shall be understood as references to the table under point 2.4.2.1 of Appendix 4 to Annex I to this Regulation.
  - 4.3.2. The references to paragraph 7.3 of Annex 1 in paragraph 2.3 of Annex 5 to UN/ECE Regulation No 24 shall be understood as references to Appendix 3 to Annex I to this Regulation.
- 4.4. 'ECE' method of measuring the net power of C.I. engines
  - 4.4.1. The references in paragraph 7 of Annex 10 to UN/ECE Regulation No 24 to the 'Appendix to this Annex' and in paragraphs 7 and 8 of Annex 10 to UN/ECE Regulation No 24 to 'Annex 1' shall be understood as references to Appendix 3 to Annex I to this Regulation.

**Changes to legislation:**

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