

Toxicity and Flammability of Child Restraint Systems

Collective amendments to working documents ECE/TRANS/WP.29/GRSP/2016/3 (Regulation No. 44), ECE/TRANS/WP.29/GRSP/2016/5 and ECE/TRANS/WP.29/GRSP/2016/6 (Regulation No. 129).

I. Proposal for Supplement 12 to the 04 series of Amendments to Regulation No. 44 (Child Restraint Systems) – Proposal of amendments to ECE/TRANS/WP.29/GRSP/2016/3

Paragraphs 6.1.5. and 6.1.6., amend to read:

"6.1.5 The **Child Restraint System** manufacturer shall declare in ~~written form~~ **writing** that the toxicity of materials used in the manufacture of restraint systems and accessible to the restrained child is in conformity with the relevant parts of **EN 71-3:2013+A1:2014 (paragraph 4.2., Table 2, Category III for specific requirements and paragraph 7.3.3. for test methodology)**. Tests confirming the validity of the declaration may be carried out at the discretion of the ~~test authority~~ **Technical Service**. This paragraph does not apply to restraint devices of groups II and III.

"6.1.6. The flammability of Child Restraint Systems submitted for approval shall be assessed by one of the following methods:

...

Method 2

The applicant shall declare in writing that when testing materials in accordance with Annex 24 of this regulation, the materials used shall not burn, nor transmit a flame front across its surface, at a rate of more than ~~{250 mm} 102 mm~~ **102 mm** per minute. Each material used in a child restraint system shall conform to these requirements. However, the requirement concerning transmission of a flame front shall not apply to a surface created by cutting a test specimen for purposes of testing pursuant to Annex 24.

..."

II. Proposal for Supplement 5 to Regulation No. 129 (Enhanced Child Restraint Systems) – Proposal of amendments to ECE/TRANS/WP.29/GRSP/2016/5

Paragraph 6.3.1.1. and 6.3.1.2., amend to read:

- "6.3.1.1. The Child Restraint System manufacturer shall declare in writing that the toxicity of materials used in the manufacture of restraint systems and accessible to the restrained child is in conformity with the relevant parts of **EN 71-3:2013+A1:2014 (paragraph 4.2., Table 2, Category III for specific requirements and paragraph 7.3.3. for test methodology)**. Tests confirming the validity of the declaration may be carried out at the discretion of the Technical Service.
- "6.3.1.2. The flammability of Child Restraint Systems submitted for approval shall be assessed by one of the following methods:
- ...
- Method 2
- The applicant shall declare in writing that when testing materials in accordance with Annex 23 of this regulation, the materials used shall not burn, nor transmit a flame front across its surface, at a rate of more than ~~{250 mm}~~ **102 mm** per minute. Each material used in a child restraint system shall conform to these requirements. However, the requirement concerning transmission of a flame front shall not apply to a surface created by cutting a test specimen for purposes of testing pursuant to Annex 24.
- ..."

III. Proposal for Supplement 1 to the 01 series of amendments to Regulation No. 129 (Enhanced Child Restraint Systems) – Proposal of amendments to ECE/TRANS/WP.29/GRSP/2016/6

Paragraphs 6.3.1.1. and 6.3.1.2., amend to read:

- "6.3.1.1. The Child Restraint System manufacturer shall declare in writing that the toxicity of materials used in the manufacture of restraint systems and accessible to the restrained child is in conformity with the relevant parts of **EN 71-3:2013+A1:2014 (paragraph 4.2., Table 2, Category III for specific requirements and paragraph 7.3.3. for test methodology)**. Tests confirming the validity of the declaration may be carried out at the discretion of the Technical Service.
- 6.3.1.2. The flammability of Child Restraint Systems submitted for approval shall be assessed by one of the following methods:
- ...
- Method 1

The Enhanced Child Restraint System manufacturer shall declare in writing that the flammability of materials used to manufacture the **Child Restraint System** is in conformity with the **method of section 5.4 of EN 71-2:2011+A1:2014 with a maximum rate of spread of flame of 30 mm/s**. Tests confirming the validity of the declaration may be carried out at the discretion of the Technical Service. **Where fabrics are assembled together, these shall be tested as a composite.**

...

Method 2

The applicant shall declare in writing that when testing materials in accordance with Annex 23 of this regulation, the materials used shall not burn, nor transmit a flame front across its surface, at a rate of more than ~~250 mm~~ **102 mm** per minute. Each material used in a child restraint system shall conform to these requirements. However, the requirement concerning transmission of a flame front shall not apply to a surface created by cutting a test specimen for purposes of testing pursuant to Annex 24.

..."

IV. Justification.

1. Burning rate: During discussions between some stakeholders after 58th GRSP session, there was a consensus to propose for the flammability rate the value in FMVSS 302, 4 inches per minute, i.e. 102 mm per minute
2. EN standards: to harmonize presentation in the 3 documents and to add the amendment 1 to EN 71-3 (A1:2014)