

# **Economic and Social Council**

Distr.: General 13 January 2022

Original: English

## **Economic Commission for Europe**

**Inland Transport Committee** 

**World Forum for Harmonization of Vehicle Regulations** 

**Working Party on General Safety Provisions** 

123rd session

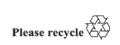
Geneva, 28 March–1 April 2022 Item 3 (b) of the provisional agenda Amendments to Safety glazing Regulations: UN Regulation No. 43 (Safety glazing)

# Proposal for Supplement 10 to the 01 Series of amendments of UN Regulation No. 43

#### **Submitted by the expert from France \***

The text reproduced below was prepared by the expert from France to amend UN Regulation No. 43 to solve a potential inconsistency regarding abrasion test requirements for flexible plastics other than windscreen. It is based on informal document GRSG-122-32 distributed at the 122nd session of the Working Party on General Safety Provisions (GRSG). The modifications to the current text of the UN Regulation are marked in bold for new and strikethrough for deleted characters.

<sup>\*</sup> In accordance with the programme of work of the Inland Transport Committee for 2022 as outlined in proposed programme budget for 2022 (A/76/6 (part V, sect. 20) para. 20.76), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.





## I. Proposal

Paragraph 8.2.1.2., amend to read:

"8.2.1.2. Plastic glazing materials shall be subjected to the tests listed in the following table. In the case of the abrasion test, the applicant shall have the alternative between the Taber test and the set of three tests composed of the carwash, sand drop and the wiper test.

Test	Windscreens		Plastics other than windscreens							
	Rigid plastics	Laminated -rigid plastics	Rigid plastics		Laminated rigid plastics		Multiple glazing			
	Motorised vehicles		Motorised vehicles	Trailers and unoccupied vehicles	Motorised vehicles	Trailers and unoccupied vehicles	Motorised vehicles	Trailers and unoccupied vehicles	Flexible plastics	
Flexibility	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	
227 g ball	A17/5	A19/5.2	A14/5	A14/5	A18/5	A18/5	A16/5	A16/5	A15/4	
2,260 g ball	-	A19/5.1								
Headform <sup>1</sup>	A17/4	A19/4	A14/4	-	A18/4	-	A16/4	-	-	
Light transmission <sup>2</sup>	A3/9.1	A3/9.1	A3/9.1	-	A3/9.1	-	A3/9.1	-	A3/9.1	
Optical distortion	A3/9.2	A3/9.2	-	-	-	-	-	-	-	
Secondary image	A3/9.3	A3/9.3	-	-	-	-	-	-	-	
Fire resistance	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	
Chemical resistance	A3/11	A3/11	A3/11.	A3/11	A3/11	A3/11	A3/11	A3/11	A3/11.2.1	
Abrasion <sup>3</sup>	A17/6.1	A19/6.1	A14/6.1	-	A18/6.1	-	A16/6.1	-	- A16/6.1	
Weathering	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	
Humidity	A17/6.4	A19/6.4	A14/6.4	A14/6.4	A18/6.4	A18/6.4	A16/6.4	A16/6.4	-	
Cross-cut <sup>2</sup>	A3/13	A3/13	A3/13	-	A3/13	-	A3/13	-	-	
High temperature	-	A3/5	-	-	A3/5	-	-	-	-	
Radiation resistance	-	A3/6	-	-	A3/6	-	-	-	-	
Resistance to temperature changes	-	A3/8	-	-	-	-	-	-	-	

<sup>&</sup>lt;sup>1</sup> Test requirements are dependent on the location of the glazing within the vehicle.

#### II. Justification

- 1. The experts from France submit the above proposal to GRSG experts to solve a potential inconsistency regarding abrasion test requirements for flexible plastics other than windscreen.
- 2. In paragraph 8.2.1.2., the tests listed in the table mention specifications of abrasion for flexible plastics under annex 16, paragraph 6.1 addressing rigid plastic multiple glazed units.

<sup>&</sup>lt;sup>2</sup> Applies only if the glazing is to be used in a location requisite for driving visibility.

<sup>&</sup>lt;sup>3</sup> Either Taber test or the set of sand drop, carwash and wiper test."

Test	Windscreens		Plastics other than windscreens							
	Rigid plastics	Laminated -rigid plastics	Rigid plastics		Laminated rigid plastics		Multiple glazing			
	Motorised vehicles		Motorised vehicles	Trailers and unoccupied vehicles	Motorised vehicles	Trailers and unoccupied vehicles	Motorised vehicles	Trailers and unoccupied vehicles	Flexible plastics	
Flexibility	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	
227 g ball	A17/5	A19/5.2	A14/5	A14/5	A18/5	A18/5	A16/5	A16/5	A15/4	
2,260 g ball	-	A19/5.1								
Headform <sup>1</sup>	A17/4	A19/4	A14/4	-	A18/4	-	A16/4	-	-	
Light transmission <sup>2</sup>	A3/9.1	A3/9.1	A3/9.1	-	A3/9.1	-	A3/9.1	-	A3/9.1	
Optical distortion	A3/9.2	A3/9.2	-	-	-	-	-	-	-	
Secondary image	A3/9.3	A3/9.3	-	-	-	-	-	-	-	
Fire resistance	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	
Chemical resistance	A3/11	A3/11	A3/11.	A3/11	A3/11	A3/11	A3/11	A3/11	A3/11.2.1	
Abrasion <sup>3</sup>	A17/6.1	A19/6.1	A14/6.1	-	A18/6.1	-	A16/6.1	-	A16/6.1	
Weathering	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	
Humidity	A17/6.4	A19/6.4	A14/6.4	A14/6.4	A18/6.4	A18/6.4	A16/6.4	A16/6.4	-	
Cross-cut <sup>2</sup>	A3/13	A3/13	A3/13	-	A3/13	-	A3/13	-	-	
High temperature	-	A3/5	-	-	A3/5	-	-	-	-	
Radiation resistance	-	A3/6	-	-	A3/6	-	-	-	-	
Resistance to temperature changes	-	A3/8	-	-	-	-	-	-	-	

- 3. In the opposite, abrasion tests seem not technically applicable to flexible plastics and are not required in annex 15, only focusing on flexible plastic panes.
- 4. This proposal aims to clarify this status by replacing the reference in paragraph 8.2.1.2. table "A16/6.1" by a single dash " ".

3