

**Economic and Social Council**Distr.: General
14 February 2025

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations**Working Party on Passive Safety****Seventy-seventh session**

Geneva, 5–9 May 2025

Item 8 of the provisional agenda

UN Regulation No. 16 (Safety-belts)**Proposal for supplement 2 to the 10 series of amendments to
UN Regulation No. 16 (Safety-belts)****Submitted by the expert from the Kingdom of the Netherlands ***

The text reproduced below was prepared by the expert from the Kingdom of the Netherlands to allow the use of talcum for the dust resistance test as an alternative to dry quartz. It is based on informal document GRSP-76-18-Rev.1 (see also paragraph 9 of ECE/TRANS/WP.29/GRSP/76). Amendments to UN Regulation No. 16 are marked in bold for new and strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2025 as outlined in proposed programme budget for 2025 (A/79/6 (Sect. 20), table 20.6), 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 7.6.3.2., amend to read:

“7.6.3.2. The dust used in the test described in paragraph 7.6.3.1. above shall consist of about 1 kg of dry quartz **or, alternatively, talcum**. The particle size distribution is as follows:

- (a) Passing 150 µm aperture, 104 µm wire diameter: 99 to 100 per cent;
- (b) Passing 105 µm aperture, 64 µm wire diameter: 76 to 86 per cent;
- (c) Passing 75 µm aperture, 52 µm wire diameter: 60 to 70 per cent.”

II. Justification

1. Quartz is considered carcinogenic (group 1) to humans and therefore its use is restricted in several regions in the world where UN Regulation No. 16 testing is performed.

2. The purpose of the dust test is to evaluate the sensitivity of the retractor to dust intrusion. The main impact on dust intrusion is the particle size distribution of the dust, which does not change between dry quartz and talcum. It is not a durability test and therefore differences in the hardness of the dust particles used will hardly influence the outcome of the test.

3. IEC 60529 is a generally accepted and used industry standard describing different degrees of protection provided by enclosures, indicated in ingress protection (IP) classes. For IP classes IP5x and IP6x, this standard uses talcum which is able to pass through a square-meshed sieve with a nominal wire diameter of 50 µm and a nominal width of a gap between wires of 75 µm. This is very much in line with current paragraph 7.6.3.2. (c) and therefore could be used as an alternative.
