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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 14853.2-2016

Replacing GB/T 14853.2-2006

**Pelletized carbon black for rubber - Part 2: Determination of
fines content and pellet attrition**

橡胶用造粒炭黑 第2部分: 细粉含量和颗粒磨损量的测定

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Foreword

GB/T 14853 "Rubber granulated carbon black" is divided into the following parts. - Part 1. Determination of density of dumping; - Part 2. Determination of fine powder content and particle wear; - Part 4. Determination of bulk strength; - Part 5. Determination of particle size distribution; Part 6. Determination of individual particle crushing strength. This part is part 2 of GB/T 14853. This part is drafted in accordance with the rules given in GB/T 1.1-2009. This part replaces GB/T 14853.2-2006 "Granulated carbon black for rubber" Part 2. Determination of fine powder content and particle wear. Compared with GB/T 14853.2-2006, the main technical changes are as follows:

--- modify the standard name "particles" to "particles";

--- modify the "use" as "the test screen will be placed" (see 3.1,.2006 version 3.1); - the deletion of "meaning and application" (Chapter 4 of the.2006 edition); - modified the description of the mechanical vibrating screen (see 4.1.1,.2006 5.1);

--- modified "about 25g ~ 28g carbon black sample" as "25g carbon black sample" (see 6.1.2,.2006 version 7.1.2). This section is proposed by the China Petroleum and Chemical Industry Association. This part of the National Rubber and Rubber Products Standardization Technical Committee (SAC/TC35) centralized. This part of the drafting unit. China Rubber Group Carbon Black Industry Research and Design Institute, Longxing Chemical Co., Ltd. This part of the main drafters. Liu Jian, Hou He Gang, Nie Suqing. This part replaces GB/T 14853.2-2006. GB/T 14853.2-2006 previous versions of the release of the situation.

--- GB/T 14853.2-1993, GB/T 14853.2-2002;

--- GB/T 14853.3-1993, GB/T 14853.3-2002. Rubber with granulated carbon black Part 2. determination of fine powder content and particle wear WARNING - Personnel using this section should have practical experience in formal laboratory work. This section does not indicate all possible security questions question. It is the responsibility of the user to take appropriate safety and health measures and to ensure compliance with the conditions set

forth in the relevant national regulations.

1 Scope

GB/T 14853.2-2016 is the Chinese national standard on pelletized carbon black for rubber - part 2: determination of fines content and pellet attrition, in the field of rubber and plastic industries. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 14 June 2016 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 January 2017. Classification: ICS 83.040.20, CCS G49. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This part of GB/T 14853 specifies the method for the determination of the content of granulated carbon black powder and the amount of particulate wear. This part applies to all kinds of rubber with granulated carbon black.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article. For undated references, the latest edition (including all modifications) applies to this document.

GB 3778 Rubber carbon black

GB/T 6003.1-2012 test sieve technical requirements and testing Part 1. wire mesh test screen Representation and Judgment of Numerical Correction Rule and Limit Value of GB/T 8170

3 Methods and abstracts

3.1 fine powder content. the carbon black sample into the 125 μ m test screen and the test screen placed in the mechanical vibrating machine vibration test screen 5min, through The carbon particles of the sieves are not granulated or the particles are crushed to the mass fraction of the sample.

3.2 Particle wear. the test powder content of the sample, continue to shock test sieve 15min, the particles were again broken or wear the quality of the test Percentage of sample mass.

4 Instruments

4.1 mechanical vibrating screen machine (slapping or bumper type), can be rotated or shaken at high speed, can be a stack of diameter of 200mm test sieve to do vibration Hit the movement. Rotation or shaking frequency of 220r/min ~ 320r/min, vibration frequency of 140/min ~ 160/min.

4.2 test sieve, $\phi 200 \times 25-0.125/0.09$, GB/T 6003.1-2012 in the R40/3 series.

4.3 test screen to receive the disk.

4.4 Screen cover.

4.5 Bottom receiving disk.

4.6 Sampler Divider, two or more parallel grooves on both sides of the divider are used to divide the carbon black sample into two parts.

4.7 small shovel or sample spoon.

4.8 balance, the scale value of 0.1g.

5 Sampling

According to the provisions of GB 3778 sampling.