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

GB/T 14853.4-2013

Replacing GB/T 14853.4-2002

**Rubber compounding ingredients -- Pelletized carbon black --
Part 4: Determination of mass strength**

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4.2 correction block, cylindrical stick, diameter 47mm, length 250mm.

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4.4 cups overflow, to receive a portion of the device, placed under the cylinder.

4.5 spatula, straight edge length of at least 55mm.

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Foreword

GB/T 14853 "Carbon black, pelletized rubber" is divided into five parts.

--- Part 1. Determination of pour density;

--- Part 2. Determination of fines content and the amount of wear particles;

--- Part 4. Determination of mass strength;

--- Part 5. Determination of particle size distribution;

--- Part 6. Determination of the strength of a single particle breakage.

This section GB/T Part of 414,853.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This Part replaces GB/T 14853.4-2002 "rubber Carbon black, pelletized - Determination of mass strength", and GB/T 14853.4-2002 phase

Ratio, the main technical changes are as follows.

--- Modify the standard name;

--- The "Summary of Method" has been described in greater detail (see Chapter 3);

--- On the "Test Procedure" described in more detail (see Chapter 7);

- Increased "initial pressure settings" (see Note 7.2);
- Modify the "precision" (see Chapter 8, 2002 edition of Chapter 8);
- Increase the informative Appendix A.

This section uses redrafted law revision adopted ASTM D1937-10 "Standard Test Method for Carbon black, pelletized - Determination of mass strength."

This section compared with ASTM D1937-10 more adjustments in the structure, listed in Appendix A of this section and ASTM D1937-

Article 10 of chapter numbering control list.

This section exists compared with ASTM D1937-10 technical differences, differences and their reasons are as follows.

- Increased blurbs normative references and references relationship with ASTM D1799, D1900, D4483 without a corresponding I

National standards (see Chapter 2 edition);

- Removed from the standard with "lb", "lbf", "in" representation to fit our representation (see the ASTM D1937-10

5.3, 5.5, 7.5, 7.6, 8.2 NOTE 1, 8.4 Note 2, 10.5, 10.6, Excerpts 4.3, 4.5, 6.5, 6.6, 7.2 Note, Note 7.4, 8.1, 8.2);

- Deleted detailed description precision, while national standards (see ASTM D1937-10 Chapter 10, Chapter 8 edition).

This part is proposed by the China Petroleum and Chemical Industry Association.

This part of the National Rubber and rubber products Standardization Technical Committee of carbon black Technical Committee (SAC/TC35/SC5) centralized.

This section is responsible for drafting unit. China Rubber Group Carbon Black Research & Design Institute.

1 Scope

GB/T 14853 provisions of this part of the determination of granulated rubber carbon black particles stacking strength.

This section applies to all types of rubber carbon black particles with granulated bulk strength measurement.

2 Normative references

The following documents for the application of this document is essential. For dated

references, only the dated version suitable for use herein

Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 3778 carbon black for rubber

3 Method summary

The carbon black sample is placed in the cylinder of the cylinder, 10s pressure is applied through the piston. Applied to the accumulation of carbon black and not just the carbon black

From cylinder to cylinder dropping the required force that is stacking strength.

5 Sampling

Sampled according to the provisions of GB 3778.

6 stacking strength testing machine barometer correction

6.1 Removing the panel stacking strength testing machine pressure gauge, replace it with a material made of aluminum or other suitable blank panel.

6.2 Scales placed stacking strength testing machine round cylinders below, with the sliding door open, so correction block through the upper circular cylinder until the station pan correction

Top block near the top of the cylindrical vessel. Correction block should be placed fit, freedom of movement in a circular cylinder, circular cylinder surface and avoid any contact touch. Correction block in place at the same time, adjust scales zero scale, and on a blank panel to zero-scale mark.

6.3 adjusting the air flow control valve until the gauge pointer from zero or stopping position to gauge the full scale of 1/3 or 1/3 or more locations.

6.4 Press the timer so that the piston slowly declining with the offset correction block. With the same amount of mass weighing scales generated by the piston.

6.5 Repeat 6.4, adjust the air flow control valve, until either a multiple of 50N, and these values marked on the panel.