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

GB/T 19208-2008

**Ground vulcanized rubber
(English Translation)**

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Foreword

This Standard is corresponding to ASTM D 5603.2001 "Standard Classification for Rubber Compounding Materials - Recycled Vulcanized Particulate Rubber". The consistent degree is not equivalent.

The main differences between ASTM D 5603.2001 and this Standard are as follows.

- ADD the terms and definitions;
- The ground vulcanized rubber is divided into three categories according to the category and special purpose of rubber products.
 - 1) Ground vulcanized rubber of whole tire, which is divided into 2 series according to the structure. radial tire and diagonal tire;
 - 2) Non-tire ground vulcanized rubber, which is divided into 4 series according to the texture. butyl rubbers, nitrile rubber, ethylene propylene diene monomer rubber, and polyurethane rubber;
 - 3) Ground vulcanized rubber of road modified asphalt, which is divided into 2 series according to the application. all-steel radial tire and other tires.
- ADD the requirements for the content of harmful substances and the determination methods of harmful substances;

- DELETE the mechanical screening method for residues on sieve in the original edition;
- ADD the determination of tensile strength and elongation at break;
- DELETE "vulcanization flat band method" in the density determination items.

This Standard replaces GB/T 19208-2003 "Ground vulcanized rubber".

Compared with GB/T 19208-2003, the main changes of this Standard are as follows.

- ADD the safety statement;
- ADJUST the normative references (see Chapter 2);
- ADD the terms and definitions (Annex A of this edition);
- RE-CLASSIFY ground vulcanized rubbers (Table 1 of this edition);
- MODIFY and add some technical indexes and requirements (Table 2 and Table

3 of this edition);

- ADD the requirements for the content of harmful substances and the determination methods of harmful substances (5.4 and 6.1.5 of this edition);
- CHANGE the inspection item of "moisture mass fraction" to "heating loss" (see 6.1.1);
- MODIFY the determination method of residues on sieve; DELETE the mechanical screening method in the determination of residues on sieve (6.2.1 of this edition);
- ADD the calculation equations of acetone extracts, residues on sieve, ferric content, and fiber content (6.1.3, 6.2.1.3, 6.2.2, and 6.2.3 of this edition);
- CHANGE "determination of injection density" to "determination of volume density" and specify the determination methods (6.2.4 of this edition);
- ADD the plasticating conditions of natural rubbers; CHANGE the roller temperature of " $40 \pm 5^{\circ}\text{C}$ " to " $(50 \pm 5)^{\circ}\text{C}$ " (Table 6 of this edition);
- MODIFY the vulcanizing time of samples (6.2.6.1 of this edition);
- MODIFY the inspection rules (Chapter 7 of this edition).

The Annex A of this Standard is normative.

This Standard was proposed by China Petroleum and Chemical Industry Association.

This Standard shall be under the jurisdiction of China National Technical Committee for the Standardization of Rubber and Rubber Products (SAC/TC 35).

Responsible drafting organization of this Standard. Tianjin Rubber Industry Institute.

Participating drafting organizations of this Standard. Shenyang Rubber Research & Design Institute of China Rubber Group, Jiangsu Yanning Jinbang Technology Development Co., Ltd., Jiangxi Yazhong Rubber Plastic Co., Ltd., and Jiangsu Jiangyin Tailian Superfine Rubber Powder Factory.

Main drafters of this Standard. Li Zian, Zheng Jiangong, Liu Huichun, Long Xiang, Luo Yazhong, and Xue Fengqing.

The historical version replaced by this Standard is as follows.

- GB/T 19208-2003.

Ground vulcanized rubber

Warning - Anyone who uses this Standard shall have working experience in professional laboratory. This Standard does not cover all the possible safety problems. Users have responsibilities to take suitable safety and health measures, which shall be ensured that they are conform to the conditions specified in the relevant national laws and regulations.

1 Scope

This Standard specifies the classification, technical requirements, test methods, inspection rules, packaging, marks, storage, and transportation requirements of ground vulcanized rubbers that are extracted from various recycled vulcanized rubbers.

This Standard is applicable to the ground vulcanized rubbers of different particle diameters which are made from various vulcanized rubbers according to the process conforming to the national economic recycling requirements.

2 Normative references

The provisions in following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Standard, however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB/T 528 Rubber, vulcanized or thermoplastic - Determination of tensile stress-strain properties (GB/T 528-1998, eqv ISO 37.1994)

GB/T 2449-2006 Sulfur for industrial use

GB/T 2941 Rubber - General procedures for preparing and conditioning test pieces for physical test methods (GB/T 2941-2006, ISO 23529.2004, IDT)

GB/T 3185-1992 Zinc oxide (Indirect method)

GB/T 3516-2006 Rubber - Determination of solvent extract (ISO 1407.1992, MOD)

GB/T 4498-1997 Rubber - Determination of ash (eqv ISO 247.1990)

GB/T 5330-2003 Industrial woven metal wire cloth (square opening series)

GB/T 6038 Rubber test mixes - Preparation, mixing and vulcanization - Equipment and procedures (GB/T 6038-2006, ISO 2393.1994, MOD)

GB/T 8089-2007 Raw natural rubber - Smoked sheet, white crepes and pale crepes

GB/T 8829-2006 Vulcanizing accelerator NOBS (ISO 11235.1999, NEQ)

GB/T 9103-1988 Industrial stearic acids

GB/T 11407-2003 Vulcanizing accelerator M

GB/T 14837-1993 Rubber and rubber products - Determination of composition by thermogravimetry

SJ/T 11365-2006 Testing methods for hazardous substances in electronic information products