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

GB/T 31357-2014

Compounded rubber - General technical specification

复合橡胶 通用技术规范

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Quarantine;
Standardization Administration of the PRC**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. The standard proposed by China Petroleum and Chemical Industry Association. This standard by the National Rubber and rubber products natural rubber Standardization Technical Committee Technical Committee (SAC/TC35/SC8) Centralized. This standard was drafted. China Institute of Agro Tropical Agricultural Sciences, Hainan Reclamation Center Test Station, People's Republic of China State Huangpu Exit Inspection and Quarantine, Shun Ho Hangzhou Rubber Engineering Co., Ltd., China Petroleum and Chemical Research and PetroChina Hospital, Hainan Natural Rubber Industry Group Co., Ltd., Yunnan Agricultural Reclamation Group Co., Ltd., Guangdong Province, Guangzhou Rubber Group Co., Ltd. Ken, China Chemical Rubber Company. The main drafters of this standard. LU Guang, Deng Hui, Zou think red, Li Yimin, Zhang Qinghu, Sun Lijun, Luohai Zhen, Chen Xuguo, Zhang Rong, Wang Yuxiang.

This standard business focus, taking into account the production and use of composite rubber interests of all parties, aimed at encouraging the production and use in accordance with the parties Composite body uses custom rubber products, and provide the basis for the production of composite rubber, acceptance, use and regulation. General technical specifications for composite rubber

1 Scope

China's national general technical specification for compounded rubber. It specifies the terms and definitions, the naming, the requirements, the inspection rules and the packaging, marking, storage and transport of compounded rubber, and it applies to the homogeneous mixture produced by mixing raw rubber with carbon black, silica and other ingredients. Compounded rubber is raw rubber that has already had its filler and part of its compounding system mixed into it before it leaves the producer, so that the buyer receives a material ready for further compounding and vulcanisation rather than bales of raw polymer. There are real technical reasons to buy rubber this way: mixing is energy intensive and needs heavy equipment, the dispersion of carbon black or silica into rubber is difficult

and largely determines the properties of the finished part, and a producer with the right equipment achieves a better and more consistent dispersion than a small factory can. There has also been a commercial reason, since compounded rubber and raw natural rubber are treated differently in trade, and that history is why a specification with defined naming, defined requirements and defined test methods matters: without one, the boundary between a genuinely compounded material and lightly filled raw rubber is a matter of assertion. The standard therefore fixes what the material must be and how it is verified, drawing its test methods from the established rubber testing standards - Mooney viscosity, tensile stress-strain, hardness, density, ash content and infrared identification. Its stated purpose is commercial: to serve the interests of both producers and users, to encourage the production and use of compounded rubber made to agreed specifications, and to provide a basis for production, acceptance, use and regulation. Issued on 31 December 2014 and in force since 1 July 2015.

This standard specifies the terms and definitions composite rubber, name, requirements, inspection rules and packaging, labeling, storage and transportation. This standard applies to a homogeneous mixture of raw rubber mixed with carbon black, silica (silica) and other ingredients made by.

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/T 528-2009 Determination of vulcanized rubber or thermoplastic rubber tensile stress-strain properties

GB/T 531.1 vulcanized rubber or thermoplastic rubber hardness test pushed Part 1. Shore hardness method (Shore hardness) Determination of

GB/T 533-2008 vulcanized rubber or thermoplastic rubber Density

GB/T 1232.1 - Part 1 uncured rubber measured by shearing disc viscometer. Mooney viscosity measurement

GB/T 4498.1 Determination of rubber ash - Part 1. muffle furnace

GB/T 5576, and latex rubber nomenclature

GB/T 6038 Rubber test feed ingredients, mixing and vulcanization - Equipment and procedures

GB/T 7764 Rubber Identification Infrared Spectroscopy GB/T 9881 Rubber term

GB/T 15340-2008 natural and synthetic rubber raw sampling and sample preparation method

GB/T 19188 natural rubber and synthetic rubber raw storage Guide

GB/T 24131-2009 Determination of raw rubber volatile content

GB/T 24797 (all parts) rubber packaging film

GB/T 29613.1 rubber pyrolysis gas chromatography - Part 1. Polymer (single and with) the identification

3 Terms and Definitions

GB/T 9881, GB/T 5576 defined by the following terms and definitions apply to this document.

3.1 Composite rubber compounded rubber One or more raw rubber and carbon black, silica (silica) and (or) a homogeneous mixture of the other ingredients.

4 Name

Wherein the raw rubber to rubber compound name or symbol of plus "compounded rubber" suffix name. Among them, the name can be abbreviated form of raw rubber, Such as "natural rubber" may be abbreviated as "natural rubber."