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

GB/T 10824-2022

Replacing GB/T 10824-2008

Technical specification of solid tyres for pneumatic tyres rims

充气轮胎轮辋实心轮胎技术规范

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Foreword

This document is drafted in accordance with GB/T 1.1-2020 "Directives for standardization - Part

1. Rules for the structure and drafting of standardizing documents". This document replaces GB/T 10824-2008 "Technical specification of solid tyres for pneumatic tyres rims".

Compared with GB/T 10824-2008, in addition to structural adjustment and editorial changes, the main technical changes are as follows: - Change some indexes of physical mechanical properties (see Table 1; Table 1 of the 2008 edition); - Change the relevant provisions on endurance (see

5.5 of the 2008 edition); - Delete the test method for endurance (see Appendix D of the 2008 edition). This document was proposed by China Petroleum and Chemical Industry Federation. This document shall be under the jurisdiction of National Technical Committee 19 on Tyres and Rims of Standardization Administration of China (SAC/TC 19). Drafting organizations of this document. Guizhou Tyre Co., Ltd., Exmile Special Tyre Co., Ltd., Cheng Shin Rubber (Xiamen) Ind. Ltd., Tianjin Wanda Tyre Group Co., Ltd., Shandong Linglong Tire Co., Ltd., Sailun Group Co., Ltd., Xuzhou Armour Rubber Co., Ltd., Beijing Research & Design Institute of Rubber Industry Co., Ltd., Zhejiang Fomay Technology Co., Ltd., Jiangsu Donghao Rubber Co., Ltd., Zhongce Rubber Group Co., Ltd., Michelin (China) Investment Co., Ltd. Main drafters of this document. Lin Xiaoyong, Yang Bangwei, Chen Jianming, Yu Zhenjiang, Chen Shaomei, Cheng Li, Sui Anquan, Xu Lihong, Wang Kexian, Wang Yiyu, Xu Jianxiong, Zheng Bin, Wang Hui, Mou Shouyong, Li Shuhuan, Li Miaomiao, Zheng Rui. This document was first issued in 1989; revised for the first time in 1996; revised for the second time in 2008. This is the third revision. Technical specification of solid tyres for pneumatic tyres rims

1 Scope

GB/T 10824-2022 is the Chinese national standard on technical specification of solid tyres for pneumatic tyres rims, 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 October 2022 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2023. Classification: ICS 83.160.99, CCS G41. 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 document specifies the technical requirements, test methods, and marking for solid tyres for pneumatic tyres rims. This document applies to new solid tyres for pneumatic tyres rims for use on counterbalanced forklifts and other industrial vehicles.

2 Normative references

The contents of the following documents, through normative references in this text, constitute indispensable provisions of this document. Among them, for dated references, only the edition corresponding to that date applies to this document. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 528 Rubber, vulcanized or thermoplastic - Determination of tensile stress-strain properties

GB/T 531.1 Rubber, vulcanized or thermoplastic - Determination of indentation hardness - Part

3 Terms and definitions

The terms and definitions defined in GB/T 6326 apply to this document.

4 Technical requirements

4.1 The size designation, dimensions, and load capacity of tyres should comply with the provisions of GB/T 10823.

4.2 The physical mechanical properties of tyres shall meet the requirements in Table 1.

4.4 The tyres shall be subjected to the endurance test according to the requirements of

5.5. After the end of any one of the 1st to 8th test stages, there shall be no defects such as delamination between the rubber layers, swelling, cracks, chipping, abnormal deformation

of the carcass, and liquid flow out of the temperature measuring hole.

5 Test methods

5.1 The outer diameter, section width, and static load performance of the tyres shall be tested according to the provisions in Appendix A and Appendix B.

5.2 For the tensile strength and elongation at break of each layer of rubber sample, it shall be sampled according to the provisions in Appendix C; tested according to the provisions of GB/T 528.

6 Marking

6.1 Each tyre sidewall shall have the following markings.

Appendix A

(Normative) Measurement methods for overall dimensions of tyres A.1 Measurement items

The outer circumference and section width of the tyre. A.2 Measurement conditions A.2.1

After the tyre is vulcanized, it shall be parked at room temperature for more than 48 h.

Before testing, the tyre and rim assembly shall be parked at a temperature of 18 °C~36 °C for at least 24 h. A.2.2 Measurement tools and their accuracy requirements are as follows:

A.3 Measurement methods A.3.1 Outer circumference of tyre Use a metal tape measure to wrap around the tyre along the centerline of the crown or near the highest point of the centerline; measure the outer circumference. The unit of measurement is mm and round up to an integer. According to formula (A.1), obtain the outer diameter.