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

GB/T 27793-2024

Replacing GB/T 27793-2011

Beater addition non-asbestos sealing materials

抄取法无石棉纤维垫片材料

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting is required. This document replaces GB/T 27793-2011 "Asbestos-free fiber gasket materials by copying method". Compared with GB/T 27793-2011, In addition to structural adjustments and editorial changes, the main technical changes are as follows: Changed the scope (see Chapter 1, Chapter 1 of the.2011 edition);

a) The element classification has been changed (see 4.1, 3.1 of the.2011 edition);

b) Changed the marking (see 4.2, 3.2 of the.2011 edition);

c) Deleted the length dimension deviation of the coil (see 4.3.2 of the.2011 edition);

d) Deleted the following clause in the thickness dimension deviation. "If the user has special requirements, it shall be implemented according to the user's requirements" (see 4.3.3 of the.2011 edition);

e) The physical and mechanical properties have been modified (see 5.4, 4.4 of the.2011 edition);

f) The appearance inspection has been changed (see 6.3, 5.3 of the.2011 edition);

1 Scope

China's national product standard for the non-asbestos gasket sheet made by the beater addition process. It specifies the classification and marking, the dimensions and their

deviations, the requirements, the test methods, the inspection rules and the marking, packaging, transport and storage of the sheet from which gaskets are cut. Beater addition is a papermaking process applied to gasket material. Fibres, fillers and a latex binder are dispersed in water, the slurry is drained on a wire to form a web, and the web is dried and calendered - which is why the sheet is uniform, thin and cheap in a way that a compression-moulded sheet is not, and why it can be made in continuous rolls rather than in pressed plates. It replaced compressed asbestos fibre sheet in the applications where asbestos was banned but the duty is moderate: engine and gearbox covers, water and oil flanges, pumps, compressors, and the great number of joints in a vehicle or a machine that see modest pressure and temperature and are cut from stock. What the standard has to control is what a papermaking process controls badly. The sheet's properties come from the fibre and filler mix and from the compaction, and both vary across a web; the binder content decides the strength, the compressibility and the resistance to the fluid; and the sheet has to seal without the asbestos that used to make thickness variation forgiving. So the requirements cover the density, the thickness and its deviation, the tensile strength, the compressibility and recovery, the stress relaxation, the fluid resistance and the sealability. The 2024 edition adds a nitrogen leakage rate test method, which measures sealing directly instead of inferring it. Issued on 28 November 2024 and in force since 1 June 2025, it replaces GB/T 27793-2011.

This document specifies the classification and marking, requirements, test methods, inspection rules, marking, packaging, etc. of non-asbestos fiber gasket materials. Packaging, transportation and storage. This document is applicable to the use of non-asbestos-free fibers as the main reinforcement material, with other non-asbestos-free fillers and adhesives added, after mixing, Plates or coils made from pulp and paper for making gaskets.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies. in this document.

GB/T 191 Pictorial markings for packaging, storage and transportation

GB/T 6682 Specifications and test methods for water used in analytical laboratories

GB/T 8170 Rules for rounding off values and expression and determination of limit values

GB/T 20671.1-2020 Classification system and test methods for non-metallic gasket materials Part

3 Terms and definitions

There are no terms or definitions that require definition in this document.

4 Classification and labeling

4.1 Classification The non-asbestos fiber gasket materials (hereinafter referred to as "gasket materials") are divided into general type, oil resistant type, swelling type, heat resistant type according to their performance.

5 Creep relaxation rate test method for gasket materials Test Method

GB/T 20671.7-2006 Classification system and test methods for non-metallic gasket materials Part

7 Tensile strength of non-metallic gasket materials Degree test method

GB/T 20671.8 Classification system and test methods for non-metallic gasket materials Part

8 Test method for softness of non-metallic gasket materials

GB/T 22308 Test method for density of sealing gasket materials

GB/T 23263 Determination of asbestos content in products