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

GB/T 9126.1-2023

**Non-metallic flat gaskets for pipe flanges - Part 1: PN
designated**

管法兰用非金属平垫片 第1部分：PN系列

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents" Drafting. This document is Part 1 of GB/T 9126 "Non-metallic flat gaskets for pipe flanges". GB/T 9126 has released the following parts.

---Part 1: PN series;

2. Class Series. This document partially replaces GB/T 9126-2008 "Dimensions of non-metallic flat gaskets for pipe flanges" and GB/T 9129-2003 "Pipe flanges" Technical

Conditions for Non-metallic Flat Gaskets", compared with GB/T 9126-2008 and GB/T 9129-2003, except for structural adjustment and editing. In addition to the modifications, the main technical changes are as follows:

- a) The asbestos rubber sheet gasket material is deleted (see 3.1 of GB/T 9129-2003);
- b) Added gasket type (see Chapter 5);
- c) Added that flat ring gaskets can be equipped with metal inner edges and related regulations (see Chapter 5, 6.3);
- d) Added modified polytetrafluoroethylene and expanded polytetrafluoroethylene materials and requirements (see
- e) The gasket size and gasket thickness have been changed (see Table 1~Table 4, Table 1~Table 4 of GB/T 9126-2008);
- f) Added (DN700~DN4000)PN2.5, (DN700~DN3600)PN6, (DN2200~DN3000) Dimensions of gaskets for PN10 flat flange (see Table 1);
- g) Delete the gasket dimensions for PN25 and PN40 flat flanges (see Table 1 of GB/T 9126-2008);
- h) The dimensions of gaskets for PN25 raised face flanges (DN1200~DN2000) are deleted (see Table 2 of GB/T 9126-2008);
- i) Added the dimensions of gaskets for DN175, DN225, and PN40 raised face flanges (see Table 2);

1 Scope

GB/T 9126.1-2023 is Part 1 of the Chinese series on non-metallic flat gaskets for pipe flanges, covering the PN designated series. The flat gasket is the cheapest component of a flanged joint and the one that decides whether it leaks: it has to be soft enough to conform to the flange faces at the bolt load available and stable enough not to relax, creep or degrade against the fluid over years. The standard sets the materials, the requirements on appearance, dimensions and dimensional tolerances, the inspection methods for each of those, the inspection rules, the marking, and the packaging, storage and transport provisions. It took effect on 1 April 2024.

This document specifies the types, materials, requirements, test methods, inspection rules, markings and markings of non-metallic flat gaskets for PN series pipe flanges. Records, packaging, storage and transportation. This document applies to non-metallic flat gaskets with nominal dimensions less than or equal to DN4000 and nominal pressures PN2.5~PN63.

2 Normative reference documents

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

GB/T 5574 Industrial rubber sheet

GB/T 12385-2008 Gasket sealing performance test method for pipe flanges

GB/T 12621-2008 Gasket stress relaxation test method for pipe flanges

GB/T 12622-2008 Test method for compression rate and rebound rate of gaskets for pipe flanges JC/T 2052 Roll-pressed asbestos-free fiber gasket material QB/T 5257

Polytetrafluoroethylene (PTFE) sheet

3 Terms and definitions

There are no terms or definitions to be defined in this document.

4 Symbols and abbreviations

The following symbols and abbreviations apply to this document. b. Inner wrapping width, unit is millimeter (mm) D. Gasket outer diameter, unit is millimeter (mm) d. Gasket inner diameter, unit is millimeter (mm) K. Bolt hole center circle diameter, unit is millimeter (mm) L. Bolt hole diameter, unit is millimeter (mm) n. Number of bolt holes, unit is units T. gasket thickness, unit is millimeter (mm) CR. Chloroprene Rubber (ChloropreneRubber) FKM. Fluororubber (Fluororubber)