

ICS 83.140.99

CCS G 47



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

GB/T 42267-2022

**Flexible cellular polymeric materials - Determination of
compression set under humid conditions**

Issued on: December 30, 2022

Implemented on: April 1, 2023

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

- foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 principles
- 5 instruments
 - 5.1 Stainless steel compression device
 - 5.2 Micrometer

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.

This document is equivalent to ISO 13362.2000 "Determination of compression set of flexible porous polymeric materials under wet conditions".

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

1 Scope

This document describes a method for the determination of compression set of flexible porous polymeric materials under wet conditions.

In this method, the sample is placed under the conditions of specified time, temperature, humidity and constant compression deformation, and the thickness of the sample after the specified recovery time is measured.

degree of change.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is

applicable to

this document.

GB/T 6342-1996 Determination of linear dimensions of foamed plastics and rubber (ISO 1923.1981, IDT)

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

compression set

The difference between the initial thickness of a porous material sample and the final thickness after being compressed at a specified temperature and time and recovered after a specified time and the initial thickness

ratio of thickness.

4 principles

Keep the sample under the specified temperature, relative humidity and constant deformation conditions for a specified time, and measure the thickness change of the sample after recovery.

5.1 Stainless steel compression device

It consists of two flat plates whose planar size is larger than that of the sample, a positioning piece and a fixture. The two plates are kept parallel during the test, and the distance between the two plates

The distance is adjusted according to the specimen compression requirements.

5.2 Micrometer

It should meet the provisions of 3.1 in GB/T 6342-1996.