

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

---

JIS K 6263 : 2022

(JRMA/JSA)

**Rubber, vulcanized or thermoplastics —  
Determination of stress relaxation**

---

ICS 83.060

Reference number : JIS K 6263 : 2022 (E)

PROTECTED BY COPYRIGHT

14 S

K 6263 : 2022

Date of Establishment: 1993-02-01

Date of Revision: 2022-02-21

Date of Public Notice in Official Gazette: 2022-02-21

Investigated by: Japanese Industrial Standards Committee  
Standards Board for ISO area

---

JIS K 6263 : 2022, First English edition published in 2023-07

Translated and published by: Japanese Standards Association  
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

---

In the event of any doubts arising as to the contents,  
the original JIS is to be the final authority.

© JSA 2023

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

HN

PROTECTED BY COPYRIGHT

## Contents

	Page
Introduction .....	1
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	2
4 Classification of tests .....	3
5 Compression stress relaxation tests .....	3
5.1 Principle .....	3
5.2 Apparatus .....	4
5.3 Calibration .....	5
5.4 Test piece .....	6
5.5 Duration, temperature and test liquid .....	7
5.6 Procedure .....	8
5.7 Expression of results .....	10
5.8 Precision .....	11
5.9 Test report .....	11
6 Tensile stress relaxation tests .....	11
6.1 Principle .....	11
6.2 Apparatus .....	12
6.3 Calibration .....	12
6.4 Test piece .....	12
6.5 Duration and temperature of test .....	13
6.6 Procedure .....	13
6.7 Expression of results .....	14
6.8 Test report .....	15
Annex A (informative) Determination method for compression stress relaxation — Precision .....	16
Annex B (normative) Calibration schedule .....	18
Annex JA (informative) Comparison table between JIS and corresponding International Standard .....	21

## Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Rubber Manufacturers Association (JRMA)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied *mutatis mutandis* pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS K 6263** : 2015), which has been technically revised.

This **JIS** document is protected by the Copyright Act.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, published patent application or utility model rights.

# Rubber, vulcanized or thermoplastics — Determination of stress relaxation

## Introduction

This Japanese Industrial Standard has been prepared based on **ISO 3384-1** : 2019, Edition 2, with some modifications of the technical contents.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

## 1 Scope

This Standard specifies procedures for determining the decrease in counterforce exerted by vulcanized or thermoplastic rubber which has been subjected to the specified compression or tensile deformation and maintained in the specified environment (not less than the standard laboratory temperature). Testing at temperatures below standard laboratory temperature can be conducted; however, the reliability of the results is not proven.

**NOTE** The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 3384-1 : 2019 *Rubber, vulcanized or thermoplastic — Determination of stress relaxation in compression — Part 1: Testing at constant temperature* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

**WARNING 1** Persons using this Standard should be familiar with normal laboratory practice. This Standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices.

**WARNING 2** Certain procedures specified in this Standard might involve the use or generation of substances, or the generation of waste, that could constitute a local environmental hazard. Reference should be made to appropriate laws/regulations on safe handling and disposal after use.

## 2 Normative references

Part or all of the provisions of the following standards, through reference in this text, constitute provisions of this Standard. For standards with the year indication, only the