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(JRMA/JSA)

**Rubber, vulcanized or  
thermoplastic—Determination of  
low-temperature properties—  
Part 4: Low-temperature retraction  
(TR test)**

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In the event of any doubts arising as to the contents,  
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## Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by The Japan Rubber Manufacturers Association (JRMA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law. Consequently **JIS K 6261**:2006 has been withdrawn and partially replaced with this Standard.

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**JIS K 6261** series consists of the following 4 parts under the general title “*Rubber, vulcanized or thermoplastic—Determination of low-temperature properties*”:

*Part 1: General introduction and guide*

*Part 2: Low-temperature brittleness*

*Part 3: Low temperature stiffening (Gehman test)*

*Part 4: Low-temperature retraction (TR test)*

# Rubber, vulcanized or thermoplastic— Determination of low-temperature properties—Part 4: Low-temperature retraction (TR test)

## Introduction

This Japanese Industrial Standard has been prepared based on **ISO 2921**:2011, Edition 5, 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 a method for the determination of the temperature-retraction characteristics of vulcanized and thermoplastic rubbers where the temperature at which the test piece, stretched and then frozen at low temperature, recovers elasticity with the temperature rise and reaches the specified percentage retraction is determined (TR test).

This Standard does not cover thermoplastic rubbers which have a yield point in the range of 5 % to 20 % elongation.

**NOTE 1** Thermoplastic rubbers having a yield point might affect the result when carrying out TR tests, and the results obtained from such tests should be analysed with caution.

**NOTE 2** The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 2921:2011 *Rubber, vulcanized—Determination of low-temperature retraction (TR test)* (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 related laws and regulations on safe handling and disposal after use.