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(JPIF/JSA)

**Plastics — Film and sheeting —  
Determination of water vapour  
transmission rate — Part 1: Humidity  
detection sensor method**

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

This Japanese Industrial Standard has been 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 Plastics Industry Federation (JPIF)/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Consequently **JIS K 7129:2008** has been withdrawn and partially replaced with this Standard.

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

**JIS K 7129** series consists of the following 7 parts under the general title “*Plastics — Film and sheeting — Determination of water vapour transmission rate —*”:

*Part 1 : Humidity detection sensor method*

*Part 2 : Infrared detection sensor method*

*Part 3 : Electrolytic detection sensor method*

*Part 4 : Gas-chromatographic detection sensor method*

*Part 5 : Pressure sensor method*

*Part 6 : Atmospheric pressure ionization mass spectrometer method*

*Part 7 : Calcium corrosion method*

# Plastics — Film and sheeting — Determination of water vapour transmission rate — Part 1 : Humidity detection sensor method

## Introduction

This Japanese Industrial Standard has been prepared based on ISO 15106-1:2003, Edition 1, with some modifications of the technical contents to be consistent with the corresponding International Standard system.

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 an instrumental method for determining the water vapour transmission rate of plastic film, plastic sheeting and multi-layer structures including plastics, which have smooth surfaces without any embossed portions, using a humidity detection sensor.

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

ISO 15106-1 : 2003 *Plastics — Film and sheeting — Determination of water vapour transmission rate — Part 1 : Humidity detection sensor method* (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.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS K 6900 *Plastics — Vocabulary*

JIS K 7130 *Plastics — Film and sheeting — Determination of thickness*

NOTE Corresponding International Standard : ISO 4593 *Plastics — Film and sheeting — Determination of thickness by mechanical scanning*

ISO 2528 *Sheet materials — Determination of water vapour transmission rate (WVTR) — Gravimetric (dish) method*