

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS Z 1707 : 2019

(JPI/JSA)

**General rules of plastic films for food
packaging**

ICS 55.040

Reference number : JIS Z 1707 : 2019 (E)

PROTECTED BY COPYRIGHT

10 S

Z 1707 : 2019

Date of Establishment: 1975-03-01

Date of Revision: 2019-01-21

Date of Public Notice in Official Gazette: 2019-01-21

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

JIS Z 1707 : 2019, First English edition published in 2019-07

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 2019

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

HT/HN

PROTECTED BY COPYRIGHT

Contents

| | Page |
|-----------------------|---|
| 1 | Scope 1 |
| 2 | Normative references 1 |
| 3 | Terms and definitions 2 |
| 4 | Quality 3 |
| 4.1 | Appearance 3 |
| 4.2 | Performance items 3 |
| 5 | Shape classification 4 |
| 6 | Dimensions and tolerances 4 |
| 6.1 | Dimensions of sheet films and tolerances 4 |
| 6.2 | Dimensions of roll films and tolerances 4 |
| 6.3 | Thickness and tolerances 5 |
| 7 | Procedure 5 |
| 7.1 | Conditioning and test condition 5 |
| 7.2 | Tests of tensile force and tensile elongation at break 5 |
| 7.3 | Modulus of elongation test 7 |
| 7.4 | Heat seal strength test 8 |
| 7.5 | Piercing strength test 8 |
| 7.6 | Tests of static coefficient of friction and kinetic coefficient of friction 9 |
| 7.7 | Impact strength test 9 |
| 7.8 | Water vapour transmission rate test 9 |
| 7.9 | Oxygen gas transmission rate test 9 |
| 7.10 | Heatresistant temperature test 9 |
| 7.11 | Wetting tension test 10 |
| 7.12 | Haze test 10 |
| 7.13 | Surface roughness test 10 |
| 7.14 | Anti-fogging properties test 10 |
| 7.15 | Shrink properties test 10 |
| 7.16 | Rounding of numbers obtained through tests 10 |
| 7.17 | Test report 10 |
| 8 | Packaging 11 |
| 9 | Marking 11 |
| Annex A (informative) | Classification of films according to performance 12 |

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 Japan Packaging Institute (JPI)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS Z 1707:1997** is replaced with this Standard.

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

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.

General rules of plastic films for food packaging

1 Scope

This Japanese Industrial Standard specifies general matters common to single-layer plastic films and multi-layer plastic films (hereafter referred to as films) that are used for food packaging. This Standard is not applicable to multi-layer plastic films consisting of paper or metal foils.

NOTE The films mentioned here indicate those mainly composed of membranous high polymer materials that are used as a component of food packaging and those having a thickness of less than 250 μm .

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 B 0633 *Geometrical Product Specifications (GPS) — Surface texture : Profile method — Rules and procedures for the assessment of surface texture*

JIS B 7503 *Mechanical dial gauges*

JIS B 7507 *Vernier, dial and digital callipers*

JIS B 7516 *Metal rules*

JIS K 6768 *Plastics — Film and sheeting — Determination of wetting tension*

JIS K 7100 *Plastics — Standard atmospheres for conditioning and testing*

JIS K 7124-1 *Plastics film and sheeting — Determination of impact resistance by the free-falling dart method — Part 1 : Staircase methods*

JIS K 7124-2 *Plastics film and sheeting — Determination of impact resistance by the free-falling dart method — Part 2 : Instrumented puncture test*

JIS K 7125 *Plastics — Film and sheeting — Determination of the coefficients of friction*

JIS K 7126-1 *Plastics — Film and sheeting — Determination of gas-transmission rate — Part 1 : Differential-pressure method*

JIS K 7126-2 *Plastics — Film and sheeting — Determination of gas-transmission rate — Part 2 : Equal-pressure method*

JIS K 7127 *Plastics — Determination of tensile properties — Part 3 : Test conditions for films and sheets*

JIS K 7129-1 *Plastics — Film and sheeting — Determination of water vapour transmission rate — Part 1 : Humidity detection sensor method*