



JAPANESE
INDUSTRIAL
STANDARD

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JIS K 5600-3-4 : 1999
(ISO 4627 : 1981)

**Testing methods for paints—
Part 3 : Film formability—
Section 4 : Evaluation of the
compatibility of product with
a surface to be painted**

ICS 87.040

Descriptors : paints, testing, film-forming capacity, cross-cut test, painting, membranes, surfaces, conformity

Reference number : JIS K 5600-3-4 : 1999 (E)

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law.

JIS K 5400 corresponding to this Standard will be withdrawn and replaced with this Standard in April 2002, at the time of three years passed after establishment of this Standard.

Consequently it is recommended to comply with this Standard.

JIS K 5600 consists of the following parts.

JIS K 5600 Part 1 Section 1 to Section 8	<i>General rule</i>
JIS K 5600 Part 2 Section 1 to Section 7	<i>Characteristics and stability of paints</i>
JIS K 5600 Part 3 Section 1 to Section 6	<i>Film formability</i>
JIS K 5600 Part 4 Section 1 to Section 7	<i>Visual characteristics of film</i>
JIS K 5600 Part 5 Section 1 to Section 11	<i>Mechanical property of film</i>
JIS K 5600 Part 6 Section 1 to Section 3	<i>Chemical property of film</i>
JIS K 5600 Part 7 Section 1 to Section 8	<i>Long-period performance of film</i>
JIS K 5600 Part 8 Section 1 to Section 6	<i>Evaluation of degradation of paint coatings</i>

JIS K 5600-3 consists of the following sections under the title of "Testing methods for paints—Part 3 : Film formability".

JIS K 5600 Part 3 Section 1	<i>Assessment of natural spreading rate (Brush application)</i>
JIS K 5600 Part 3 Section 2	<i>Surface-drying test (Ballotini method)</i>
JIS K 5600 Part 3 Section 3	<i>Through-dry</i>
JIS K 5600 Part 3 Section 4	<i>Evaluation of the compatibility of product with a surface to be painted</i>
JIS K 5600 Part 3 Section 5	<i>Pressure test for stackability</i>
JIS K 5600 Part 3 Section 6	<i>Print free test</i>

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Testing methods for paints—

Part 3 : Film formability—

Section 4 : Evaluation of the compatibility of product with a surface to be painted

Introduction This Japanese Industrial Standard has been prepared based on ISO 4627, *Paints and varnishes—Evaluation of the compatibility of a product with a surface to be painted—Methods of test* issued in 1981 as the first edition without changing the technical contents.

This Standard describes procedures for assessing the compatibility of a product with a surface to be coated. The methods of test specified require to be completed, for any particular application, by the following supplementary information. This information shall be derived from the national standard or other documents for the product under test or, where appropriate, shall be the subject of agreement between the interested parties.

- a) Whether the product or system under test shall be tested by laboratory or “on-site” procedures or both.
- b) Whether the product or system under test is to be applied to unpainted, specially treated, painted (unaged) or painted (aged) substrates.
- c) Material and surface preparation of the substrate to be painted (see 5.2 and 5.3).
- d) Material and surface preparation of the reference substrate.
- e) As appropriate, material and method for any special treatment of the substrate, including duration and conditions of drying (or stoving and ageing) (see 5.2.2).
- f) Paint or paint system for the painting of the substrate, including method of application, spreading rate (or film thickness), and duration and conditions of drying (or stoving and ageing), if appropriate (see 5.2.3).
- g) Method and duration of ageing of the painted substrate, if appropriate (see 5.2.4).
- h) Method of application of the product or system under test, including spreading rates (or film thickness), and duration and conditions of drying (or stoving and ageing).
- i) Method (or methods) of test for the determination of the degree of drying using the procedures specified in JIS K 5600-3-2, JIS K 5600-3-5 and/or JIS K 5600-3-6, as appropriate.
- j) Laboratory tests for the evaluation of the coated substrate (see 7.1), if appropriate.
- k) Supplementary information necessary for conducting the test specified in JIS K 5600-4-3, if appropriate.
- l) Method of measurement of gloss in accordance with JIS K 5600-4-7, if appropriate.