



JAPANESE
INDUSTRIAL
STANDARD

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JIS K 5600-3-2 : 1999

(ISO 1517 : 1973)

**Testing methods for paints—
Part 3 : Film formability—
Section 2 : Surface-drying test
(Ballotini method)**

ICS 87.040

Descriptors : paints, film-forming capacity, cross-cut test, testing, painting, surfaces,
dry-heat tests, drying, membranes

Reference number : JIS K 5600-3-2 : 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JIS K 5400 corresponding to this Standard will be withdrawn and replaced with this Standard in April 2002, at the time of three years passed after establishment of this Standard.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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the original JIS is to be the final authority.

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Testing methods for paints— Part 3 : Film formability— Section 2 : Surface-drying test (Ballotini method)

Introduction This Japanese Industrial Standard has been prepared based on ISO 1517, *Paints and varnishes—Surface-drying test—Ballotini method* issued in 1973 as the first edition without changing the technical contents.

The method of test described in this Standard requires to be completed, for any particular application, by the following supplementary information. This information should be derived from the national standard or other document for the material under test or, where appropriate, should be the subject of agreement between the interested parties.

- a) Nature and surface preparation of substrate.
- b) Method of application of test coating to substrate.
- c) Thickness, in micrometres, of the dry coating, including method of measurement, and whether it is a single coating or a multicoat system.
- d) Duration and conditions of drying of primer and/or undercoat before testing.
- e) Duration of drying before testing, if applicable.

The portions underlined with dots in this Standard are not stated in the original International Standard.

1 Scope

1.1 This Standard specifies a method for determining the surface-drying characteristics of a coating of a paint or varnish by the Ballotini method which dries by the action of air or by chemical reaction of its components.

The method is not intended to apply to stoving products.

1.2 The method described may be carried out.

Either as a “go/no go” test, by determining the surface-drying state after a specified time, to assess compliance with a particular requirement, or by determining the surface-drying state at suitable intervals until the surface-drying time is obtained.

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. If the indication of the year of coming into effect is given to these referred standards, only the edition of indicated year constitutes the provision of this Standard but the revision and amendment made thereafter are not applied. The normative references without the indication of the year of coming into effect apply limiting only to the most recent edition (including the amendment).