TC 35

International Standard ISO 7254

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION•МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ•ORGANISATION INTERNATIONALE DE NORMALISATION

Paints and varnishes — Assessment of natural spreading rate — Brush application

Peintures et vernis — Évaluation du rendement d'application normal (naturel) — Application à la brosse

First edition — 1984-09-01

UDC 667.612.62 **Ref. No. ISO 7254-1984 (E)**

Descriptors : paints, varnishes, tests, brush coating, determination, spreading rate.

Price based on 2 pages

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7254 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes.*

Paints and varnishes — Assessment of natural spreading rate — Brush application

0 Introduction

This International Standard is one of a series of standards dealing with the sampling and testing of paints, varnishes and related products.

For any particular application, the method of test described in this International Standard needs to be completed by the following supplementary information. This information should be derived in part or totally from an (inter)national standard or other document related to the product under test or, if appropriate, should be agreed between the interested parties.

a) Material, thickness and surface preparation of the substrate.

b) The method of expressing the natural spreading rate (see clause 3).

c) The attitude of the test surface, i.e. whether horizontal or vertical.

d) The temperature of application of the paint or varnish.

1 Scope and field of application

1.1 This International Standard describes a method for assessing the natural spreading rate of application of a product (in terms of area per wet film mass or area per wet film volume, as appropriate) when applied by brush to test panels.

1.2 The method is not suitable for products that contain highly volatile solvents.

NOTE — The results are dependent on the type and nature of the substrate. Although consistent results may be obtained by one operator, care should be taken if results between operators and between laboratories are to be compared. In such circumstances, the use of a common reference product is recommended.

2 References

ISO 1512, *Paints and varnishes — Sampling.*

ISO 1513, *Paints and varnishes — Examination and preparation of samples for testing.*

ISO 1514, *Paints and varnishes — Standard panels for testing.*[1)]

ISO 2811, *Paints and varnishes — Determination of density.*

ISO 3270, *Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing.*

3 Definition

For the purpose of this International Standard, the following definition applies :

natural spreading rate : The average area per wet film mass or the average area per wet film volume when applied uniformly by a skilled operator using a brush to give a film free from runs, sags and tears.

NOTE — The natural spreading rate is expressed either in m^2/kg (area per mass) or m^2/l (area per volume).

4 Apparatus

4.1 Brush, of good quality hog bristle or nylon monofilament, about 50 mm wide.

A new brush should not be used for the preparation of test panels, but one that has been conditioned by previous use.

4.2 Balance, accurate to 10 mg.

5 Sampling

Take a representative sample of the product to be tested (or of each product in the case of a multi-coat system) as described in ISO 1512.

Examine and prepare the sample for testing as described in ISO 1513.

6 Test panels

Unless otherwise specified, the test panels shall comply with, and shall be prepared as described in, ISO 1514.

Unless otherwise specified the test panels shall be rectangular with sides 300 mm × 600 mm.

NOTE — Because of the practical difficulty in accurately weighing the mass of product applied, the area of the test panel should be not less than 0,1 m^2.

1) At present at the stage of draft. (Revision of ISO 1514-1974.)