

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1518

PAINTS AND VARNISHES

SCRATCH TEST

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 1518, *Paints and varnishes – Scratch test*, was drawn up by Technical Committee ISO/TC 35, *Paints and varnishes*, the Secretariat of which is held by the Nederlands Normalisatie-instituut (NNI).

Work on this question led to the adoption of Draft ISO Recommendation No. 1518 which was circulated to all the ISO Member Bodies for enquiry in November 1968. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Australia	Israel	Sweden
Austria	Italy	Switzerland
Denmark	Netherlands	Turkey
Germany	Peru	U.A.R.
Greece	Poland	United Kingdom
India	Portugal	U.S.S.R.
Iran	South Africa, Rep. of	
Ireland	Spain	

The following Member Body opposed the approval of the Draft :

France

This Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided to accept it as an ISO RECOMMENDATION.

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INTRODUCTION

This ISO Recommendation is one of a series dealing with the sampling and testing of paints, varnishes and related products. It should be read in conjunction with ISO Recommendations R 1512, *Paints and varnishes – Sampling*, R 1513, *Paints and varnishes – Examination and preparation of samples for testing*, and R 1514, *Paints and varnishes – Standard panels for testing*.

The method of test described 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 product under test or where appropriate should be the subject of agreement between the parties to the test.

- (1) Nature and surface preparation of substrate.
- (2) Method of application of test coating to substrate.
- (3) Thickness, in micrometres, of the dry coating, including method of measurement, and whether it is a single coating or a multicoat system.
- (4) Duration and conditions of drying of the coated panel before testing (or conditions of stoving and ageing if applicable).
- (5) The specified load to be applied to the needle during the test, if applicable.

1. SCOPE

- 1.1 This ISO Recommendation describes a test procedure for determining under standard conditions the resistance of a single coating or a multicoat system of paint, varnish or related product to penetration by scratching with a needle.
- 1.2 The method described may be carried out
 - either* as a “go/no go” test, by testing with a single specified load applied to the needle to assess compliance with a particular requirement;
 - or* by applying increasing loads to the needle to determine the minimum load at which the coating is fully penetrated to the substrate.