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Paints and varnishes — Determination of water-vapour transmission properties — Cup method

Peintures et vernis — Détermination des propriétés de transmission de la vapeur d'eau — Méthode de la coupelle



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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

This second edition cancels and replaces the first edition (ISO 7783:2011), of which it constitutes a minor revision to correct the conversion factor in [Formula \(3\)](#) and to add a reference to ISO 4618 on paints and varnishes terminology in [Clause 3](#).

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Introduction

This document is one of a series of standards dealing with the sampling and testing of paints, varnishes and related products. It describes a method for determining the water-vapour transmission rate of self-supporting and non-self-supporting coatings.

The water-vapour transmission rate is not necessarily a linear function of film thickness, temperature or relative-humidity difference. A determination carried out under one set of conditions will not necessarily be comparable with one carried out under other conditions. Therefore, it is essential that the conditions of test are chosen to be as close as possible to the conditions of use.

Water-vapour transmission is of greatest interest under conditions of high humidity. For this reason, the wet-cup method has been adopted as the reference method. By agreement, other procedures and conditions, like the dry-cup method, may be used.