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Rigid cellular plastics— Determination of water vapour transmission properties

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Contents

	Page
Intr	oduction1
1	Scope
2	Normative references — 1
3	Terms and definitions2
4	Principle
5	Apparatus and materials3
6	Sample4
7 7.1 7.2 7.3	Test specimens 4 Dimensions 4 Number of specimens 5 Conditioning 5
8	Procedure5
9 9.1 9.2 9.3 9.4 9.5	Expression of results6Calculation of constant rate of change of mass6Calculation of water vapour transmission rate7Calculation of water vapour permeance7Calculation of water vapour permeability7Calculation of water vapour diffusion resistance index7
10	Test report ·····8
Ann	ex A (normative) Preparation of test assemblies10
Ann	ex B (informative) Derivation of the formula for calculating the water vapour diffusion resistance index12
Ann	ex JA (informative) Comparison table between JIS and corresponding International Standard

Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Plastics Industry Federation (JPIF)/Japan Urethane Foam Association (JUFA)/ Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently JIS K 7225:2005 is replaced with this Standard.

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Rigid cellular plastics—Determination of water vapour transmission properties

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Introduction

This Japanese Industrial Standard has been prepared based on **ISO 1663**:2007, Edition 3, with some modifications of the technical contents.

The dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies a method of determining the water vapour transmission rate, water vapour permeance, water vapour permeability and water vapour diffusion resistance index for rigid cellular plastics. The scope of this method provides for the testing of rigid cellular plastics that have thicknesses from 10 mm or over and which may, as an integral part of the material, contain natural skins or adhered facings of some different material. Three different sets of temperature and humidity conditions are provided as follows:

- a) 38 °C and a relative-humidity gradient across the specimen of 0 % to 88 %;
- b) 23 °C and a relative-humidity gradient across the specimen of 0 % to 85 %;
- c) 23 °C and a relative-humidity gradient across the specimen of 0 % to 50 %.

The results obtained by this method are suitable for design purposes, production control, and for inclusion in product specifications.

The method is suitable for materials which have water vapour transmission rates in the range 3 $\mu g/(m^2 \cdot s)$ to 200 $\mu g/(m^2 \cdot s)$.

NOTE The International Standard corresponding to this Standard and the symbol of degree of correspondence is as follows.

ISO 1663:2007 Rigid cellular plastics—Determination of water vapour transmission properties (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS K 6900 Plastics—Vocabulary

JIS K 7100 Plastics—Standard atmospheres for conditioning and testing