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# International Standard



# 3270

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

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## Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing

*Peintures et vernis et leurs matières premières — Températures et humidités pour le conditionnement et l'essai*

Second edition — 1980-06-15

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Price based on 2 pages

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

International Standard ISO 3270 was developed by Technical Committee ISO/TC 35, *Paints and Varnishes*.

This second edition was submitted directly to the ISO Council, in accordance with clause 5.10.1 of part 1 of the Directives for the technical work of ISO. It cancels and replaces the first edition (i.e. ISO 3270-1974), which had been approved by the member bodies of the following countries :

Australia	India	South Africa, Rep. of
Austria	Iran	Sweden
Chile	Ireland	Switzerland
Czechoslovakia	Israel	Thailand
Denmark	Netherlands	Turkey
Egypt, Arab Rep. of	Poland	United Kingdom
France	Portugal	USSR
Germany, F.R.	Romania	Yugoslavia

The member bodies of the following countries had expressed disapproval of the document on technical grounds :

Bulgaria  
Canada  
New Zealand

# Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing

## 1 Scope

This International Standard specifies conditions of temperature and relative humidity for use in the conditioning and testing of paints and varnishes and their raw materials.

## 2 Field of application

The International Standard is intended to apply, unless other conditions are specified, to the conditioning and testing of paints, varnishes (wet and dry films) and their raw materials.

## 3 Reference

ISO 558, *Conditioning and testing — Standard atmospheres — Definitions*.

## 4 Definitions (conforming to ISO 558)

**4.1 conditioning atmosphere** : The atmosphere in which a sample or test piece is kept before being subjected to test. It is characterized by specified values for one or more of the parameters temperature, relative humidity and pressure, which are kept within the prescribed tolerances for a given period of time. The chosen values and period of time depend on the nature of the sample or test piece to be tested.

### NOTES

1 The term "conditioning" refers to the operation as a whole designed to bring a sample or test piece, before testing, into a specified condition in relation to temperature and humidity, by keeping it for a given period of time in the conditioning atmosphere.

2 The conditioning can be done either in the laboratory or in a special enclosure termed "the conditioning chamber" or in the test chamber.

**4.2 test atmosphere** : The atmosphere to which a sample or test piece is exposed throughout the test. It is characterized by specified values for one or more of the parameters temperature, relative humidity and pressure, which are kept within the prescribed tolerances.

NOTE — The test may be carried out either in the laboratory or in a special chamber termed "the test chamber", or in the conditioning chamber, the choice depending on the nature of the test specimen and on the test itself. For example, close control of the test atmosphere may not be necessary if the change of properties of the test specimen is insignificant in the test period.

## 5 Temperatures and humidities for conditioning and testing

The temperature and humidity shall be chosen from those defined in 5.1 and 5.2

### 5.1 Standard conditions (to be used whenever possible)

$23 \pm 2$  °C and  $50 \pm 5$  % relative humidity.

### 5.2 Other conditions

#### 5.2.1 When the temperature only is to be controlled :

$23 \pm 2$  °C and ambient relative humidity.

#### 5.2.2 When neither the temperature nor relative humidity is to be controlled :

ambient conditions.

### NOTES

1 For countries where the conditions of 5.1 and 5.2.1 are difficult to maintain, for example tropical countries, alternative conditions may be chosen, such as  $27 \pm 2$  °C and  $65 \pm 5$  % relative humidity.

2 For some tests the limits for control of temperature are more strict. For example when determining viscosity or consistency, control limits of  $\pm 0,5$  °C or less are recommended.