### International Standard



3270

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION●MEЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО CTAHДAPTUЗАЦИИ●ORGANISATION INTERNATIONALE DE NORMALISATION

# 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

### iTeh STANDARD PREVIEW (standards.iteh.ai)

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Descriptors: paints, varnishes, testing conditions, temperature, test atmospheres, humidity, tests.

#### **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 countriesttps://standards.iteh.ai/catalog/standards/sist/3dcf2cd9-d7d5-4438-b2c4-

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Australia Austria Chile Czechoslovakia India Iran Ireland Israel

South Africa, Rep. of Sweden

Denmark Egypt, Arab Rep. of Netherlands

Switzerland Thailand Turkey

France

Poland

United Kingdom

Germany, F.R.

**Portugal** Romania **USSR** 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

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#### Field of application 2

The International Standard is intended to apply aunless other ds/sist/3dcf2cd9-d7d5-4438-b2c4conditions are specified, to the conditioning and testing of 0-327 paints, varnishes (wet and dry films) and their raw materials.

#### Reference

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

#### **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 ISO 3270:1980 is insignificant in the test period.

#### 5 19 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 ± 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 ± 0,5 °C or less are recommended.

#### 6 Conditioning

- **6.1** The period of conditioning shall be as specified in the particular test method under consideration.
- **6.2** The products to be tested and the test apparatus shall be placed in the conditioning atmosphere so that they reach equilibrium with the atmosphere as soon as possible. The materials should be protected from direct sunlight and the atmosphere should be clean.

Test panels shall be separated from each other and from the walls of the enclosure by a distance of at least 20 mm.

#### 7 Testing

Unless otherwise specified, the products shall be tested under the same conditions as those in which they have been conditioned.

If the standard conditions, specified in 5.1, have been used for conditioning and testing, the test report shall state :

Conditioned, for ...h, and tested under the standard conditions conforming to ISO 3270.

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