
INTERNATIONAL STANDARD



3270

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

Paints and varnishes and their raw materials — Atmospheres for conditioning and testing

Peintures et vernis et leurs matières premières — Atmosphères pour le conditionnement et l'essai

First edition — 1974-11-01

STANDARDSISO.COM : Click to view the full PDF of ISO 3270:1974

UDC 667.63 : 551.51

Ref. No. ISO 3270-1974 (E)

Descriptors : paints, varnishes, test atmospheres, test conditioning, tests.

Price based on 1 page

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 drawn up by Technical Committee ISO/TC 35, *Paints and varnishes*, and circulated to the Member Bodies in July 1973.

It has 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	U.S.S.R.
Germany	Romania	Yugoslavia

The Member Bodies of the following countries expressed disapproval of the document on technical grounds :

Bulgaria
Canada
New Zealand

Paints and varnishes and their raw materials — Atmospheres for conditioning and testing

1 SCOPE

This International Standard specifies standard 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/R 558, *Conditioning atmosphere, test atmosphere, reference atmosphere — Definitions.*

4 DEFINITIONS (conforming to ISO/R 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 temperature, relative humidity and pressure maintained within the prescribed tolerances for a given period of time. These values and this period of time depend on the nature of the sample or test piece to be tested.

NOTES

1 The term "conditioning" should be restricted 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, the choice depending on whether or not the conditioning atmosphere is similar to the atmosphere in the laboratory 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 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 whether or not the test atmosphere is similar to the atmosphere in the laboratory or in the conditioning chamber.

5 ATMOSPHERES FOR CONDITIONING AND TESTING

The atmosphere shall be chosen from those defined in 5.1 and 5.2.

5.1 Standard atmosphere

(to be used whenever possible)

23 ± 2 °C and 50 ± 5 % relative humidity.

5.2 Other atmospheres

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.

NOTE — 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 ± 2 °C and 65 ± 5 % relative humidity.

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 in the same atmosphere as that in which they have been conditioned.

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

Conditioned, for ... h, and tested in the standard atmosphere conforming to ISO 3270.