

**PAKKIMINE. LÕPLIKULT KOMPLEKTEERITUD
VEOPAKENDID. KATSETINGIMUSTELE KOHANDAMINE**

**Packaging - Complete, filled transport packages and
unit loads - Conditioning for testing**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-EN ISO 2233:2000 sisaldab Euroopa standardi EN ISO 2233:1999 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 2233:2000 consists of the English text of the European standard EN ISO 2233:1999.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 23.06.1999.	Date of Availability of the European standard is 23.06.1999.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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English version

**Packaging - Complete, filled transport packages - Conditioning
for testing (ISO 2233:1994)**

Emballages - Emballages d'expédition complets et pleins -
Conditionnement en vue des essais (ISO 2233:1994)

Verpackung - Versandfertige Packstücke - Klimatische
Vorbehandlung für die Prüfung (ISO 2233:1994)

This European Standard was approved by CEN on 5 May 1999.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

The text of the International Standard from Technical Committee ISO/TC 122 "Packaging" of the International Organization for Standardization (ISO) has been taken over as an European Standard by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR.

This European Standard replaces EN 22233:1992.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 1999, and conflicting national standards shall be withdrawn at the latest by December 1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 2233:1994 has been approved by CEN as a European Standard without any modification.

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Packaging — Complete, filled transport packages — Conditioning for testing

1 Scope

This International Standard specifies a method for the conditioning of complete, filled transport packages for testing.

2 Principle

The package is exposed to predetermined atmospheric conditions for a predetermined period of time.

3 Atmospheric conditions

One or more of the preferred conditions given in table 1 shall be selected.

Table 1 — Preferred atmospheres for conditioning

Condition	Temperature		Relative humidity %
	°C	K	
A	− 55	218	Not specified
B	− 35	238	Not specified
C	− 18	255	Not specified
D	+ 5	278	85
E	+ 20	293	65
F	+ 20	293	90
G	+ 23	296	50
H	+ 27	300	65
J	+ 30	303	90
K	+ 40	313	Uncontrolled
L	+ 40	313	90
M	+ 55	328	30

4 Control tolerances (as described in annex A)

4.1 Temperature

4.1.1 Deviation among peak values

For conditions A, B, C and K, the maximum permissible temperature difference of ten measurements distributed about the nominal value over at least 1 h shall be ± 3 °C. For all other conditions, the maximum permissible difference shall be ± 2 °C.

4.1.2 Deviation of the mean

For all conditions, the mean value shall be within ± 2 °C of the nominal value chosen from table 1.

NOTES

1 When using condition D, care should be taken to ensure that the dew-point is not reached.

2 Permissible temperature deviations given are not necessarily those required to maintain the required range of relative humidity; smaller temperature deviations may therefore be necessary in order to comply with the tolerances required for relative humidity.

4.2 Relative humidity

4.2.1 Deviation among peak values

For all conditions with a humidity requirement, the maximum permissible relative humidity difference of ten measurements distributed about the nominal value over at least 1 h shall be ± 5 percentage units.