INTERNATIONAL STANDARD

ISO 7371

Second edition
1995-11-15

AMENDMENT 1
1997-12-15

Household refrigerating appliances — Refrigerators with or without low-temperature compartment — Characteristics and test methods

AMENDMENT 1: Special compartments for the preservation of highly perishable foodstuffs

Appareils de réfrigération ménagers — Refrigérateurs ménagers avec ou sans compartiment basse température — Caractéristiques et méthodes d'essai

AMENDEMENT 1: Compartiments spéciaux destinés à l'entreposage des denrées hautement périssables

Reference number
ISO 7371:1995/Amd.1:1997(E)

Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Amendment 1 to International Standard ISO 7371:1995 was prepared by Technical Committee ISO/TC 86, *Refrigeration*, Subcommittee SC 5, *Construction and testing of household refrigerators*.

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Printed in Switzerland

Household refrigerating appliances — Refrigerators with or without low-temperature compartment — Characteristics and test methods

AMENDMENT 1: Special compartments for the preservation of highly perishable foodstuffs

Page 1

1 Scope

Add at the end of the clause:

Appliances covered by this International Standard may also incorporate special compartments for the storage of highly perishable foodstuffs.

Page 2

Add the definition:

3.2.6 chill compartment: Compartment intended specifically for the storage of highly perishable foodstuffs in which the temperatures can be maintained between –2 °C and +3 °C, and the volume of which is capable of accommodating at least 2 "M" packages (see 13.1.1).

Page 3

3.3.5.3 total gross volume
and
3.3.5.7 total storage volume

Replace "and cellar compartment(s)" *with* "chill compartment(s), and cellar compartment(s)"

Page 4

Add the definition:

3.4.3.4 chill compartment temperatures, $t_{cc\,max}$, $t_{cc\,min}$: Maximum and minimum instantaneous temperatures of any "M" package of a load in storage as specified in 8.5.

3.4.4 Defrosting

Add the following text:

The method of defrosting shall be specified separately for the fresh food storage compartment(s), low temperature compartment(s) and for the chill compartment, if any.

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5.4 Doors, lids and fittings

In the second paragraph replace "and cellar compartments" *with* "chill compartments and cellar compartments"

Page 7

5.6 Disposal of defrost water

Replace in the NOTE "and cellar compartments only" *with* ", cellar and chill compartments only"

6.1.4 Rated storage shelf area

Replacement text

The measured storage shelf area, including that of any cellar and chill compartment, shall not be less than the rated storage shelf area by more than 3 % of the latter.

Page 8

Add the following as column 8 in table 2

Chill compartment (see 3.4.3.4)
t_{cc} max, min
$-2 \leq t_{cc}$ min, t_{cc} max $\leq +3$

Page 9

7.2.2 Determination of total storage volume

In both paragraphs, replace "cellar compartment(s)" *with* "cellar compartment(s), chill compartment(s)"

7.2.3 Storage volume of fresh food storage and cellar compartments (if applicable)

Replace the subtitle and the first sentence with:

7.2.3 Storage volume of fresh food storage, chill and cellar compartments (if applicable)

The storage volume of the fresh food storage, cellar and chill compartments shall be the gross volume of the compartment minus

Replace the last dashed text with:

– the space between the inner door protrusion (dykes) and the inner liner of the fresh food storage, cellar and chill compartment.

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7.3.1.7.2 Fresh food storage compartment and cellar compartment, if any
and
7.3.3.1 Fresh food storage compartment and cellar compartment , if any

Replace in the subtitle " and cellar compartment" *with* ", chill and cellar compartments"

Page 14

8.2.2 Composition

Add the following after item a) of this subclause:

b) For the measurement of chill compartments, it is necessary to take test packages with a freezing point of −5 °C and a suitable filling containing per 1 000 g:

232 g of oxyethylmethylcellulose
725 g of water
43 g of sodium chloride
0,8 g of 6-chloro-*m*-cresol.

The present item b) becomes c).

Page 15

Replace the title and 1st paragraph of subclause 8.5 as follows:

8.5 Measurement of the temperature of the fresh food storage compartment, cellar compartment and chill compartment

The temperatures t_1, t_2, t_3 (see 3.4.3.1) and t_{c1}, t_{c2}, t_{c3} (see 3.4.3.3) shall be measured in copper or brass cylinders, suspended and located at the temperature-sensing points T_1, T_2, T_3 and T_{c1}, T_{c2}, T_{c3} as shown in figures 9 and 10 halfway between the rear internal wall of the appliance and the internal wall of the closed door.

The temperatures $t_{cc\ max}$, $t_{cc\ min}$ (see 3.4.3.4) shall always be measured in "M" packages positioned or suspended at least 25 mm away from all walls and ceiling and from the other packages of the test load (see 13.1.1).

In chill compartments "M" packages shall be placed where the highest and lowest temperatures are expected.

When "M" packages are used, these shall be suspended with the largest surface horizontal, except for the following special case of a chill compartment.

In the case of a chill compartment with special subdivisions (shelves, etc.) which are part of the design, if the dimensions are too small to allow the horizontal positioning of the "M" packages, it is permissible to position them vertically. Moreover, if the dimensions are too small to accommodate an "M" package (for example in door shelves), a special support shall be used to position the "M" package next to the shelf and as close as possible to the door liner.

The mean internal temperatures, t_m and t_{cm}, shall than be calculated as specified in 3.4.3.1 and 3.4.3.3.

Page 18

Replace the subtitle of subclause 12.1.2 as follows:

12.1.2 Fresh food storage, chill and cellar compartments (if applicable)

13.1.1 Preparation of the appliance

Add this paragraph at the end of the subclause:

If the chill compartment has thermostat(s) and/or other temperature control device(s) which is/are designed for adjustment by the user, the thermostat(s) and/or device(s) shall be set at the manufacturer's recommended position(s) for normal operation at the appropriate ambient temperature. Different re-adjustment may be allowed when required to compensate for different ambient temperatures and/or different operating conditions of the other compartments during the tests specified in clauses 13 and 17.

13.1.2 Storage plan

Add the following at the end of the 1st paragraph:

The chill compartment shall be loaded as follows:

– for chill compartments with a storage volume up to 10 litres: two "M" packages;

– for chill compartments with a storage volume greater than 10 litres: two "M" packages and one additional 500 g test package for each additional 10 litres of storage volume to a maximum of 10 packages as follows:

Storage volume V of chill compartment litres	**Number of packages**
$V < 10$	2
$10 \leqslant V < 20$	3
$20 \leqslant V < 30$	4
$70 \leqslant V < 80$	9
$V \geqslant 80$	10

There shall always be at least two "M" packages although it is permissible to replace the test packages by "M" packages.

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13.2 Test report

Add the following:

g) the value of the recorded chill compartment temperatures $t_{cc\ max}$ and $t_{cc\ min}$;

h) a sketch of the loading arrangement of the chill compartment, showing the locations of the "M" packages with the highest and the lowest temperatures (see 3.4.3.4).

Page 22

Add the following to table 4, after t_{cm}

$t_{cc\ max}$	$\leqslant +3$	$\leqslant +3$	$\leqslant +3$	$\leqslant +3$

Also in table 4 add the following note and make the existing one NOTE 1.

NOTE 2 If there are any chill compartments, the temperature $t_{cc\ max}$ shall be as close as possible to, but shall not exceed, +3 °C.

Page 24

17.1.2 Preparation of the appliance

Replace the second paragraph with the following:

Ice trays shall be removed and the fresh food storage compartment, cellar compartment and chill compartment, if any, shall be equipped with copper or brass cylinders or "M" packages or test packages in accordance with 8.5.

17.1.3 Measurements

Add the following at the end of the subclause:

Throughout the ice-making test, $t_{cc\ min}$ shall remain above −2 °C and $t_{cc\ max}$ shall remain below +3 °C.

Page 24

18 Test for absence of odour and taste

Replace "and cellar compartment" *with* ", cellar and chill compartment"

Page 25

18.1.3 Thermostat setting

Add the following at the end of the subclause:

c) Chill compartment:

$$-2\ °C \leqslant t_{cc\ min},\ t_{cc\ max} \leqslant +3\ °C$$

18.1.4 Samples

Replace in the penultimate paragraph "and cellar compartments" *with* ", cellar and chill compartments"

Page 26

18.2.2 Evaluation

Replace item c) with the following:

c) temperature adjustment in the fresh food storage, cellar and chill compartment for the second test for absence of odour and taste.

Page 27

21.1 Rating plate

Add at the end of item f):

– the chill compartment(s), if any;

21.2 Identification of frozen food storage compartments

Add the following at the end of the subclause:

NOTE — A text and a symbol for the identification of a chill compartment will be added when defined.