International Standard



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Rubber condoms — Part 7: Determination of resistance to deterioration during storage

Préservatifs masculins en caoutchouc - Partie 7 : Détermination de la résistance à la détérioration durant le stockage

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Foreword

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of 150 A01A-1-1.086

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 4074/7 was prepared by Technical Committee ISO/TC 157, Mechanical contraceptives.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Rubber condoms — Part 7: Determination of resistance to deterioration during storage

1 Scope and field of application

This part of ISO 4074 specifies a method for the determination of the resistance of packaged condoms to deterioration during storage. ISO 4074/9 and/or ISO 4074/6 are used in conjunction with this method.

NOTE — Condoms delivered in bulk to the distributor shall be repacked individually before being tested in accordance with this part of ISO 4074.

2 References

ISO 188, Rubber, vulcanized — Accelerated ageing or heat-resistance tests.

ISO 4074, Rubber condoms -

Part 6: Determination of bursting volume and pressure

Part 9: Determination of tensile properties.

Part 10: Packaging and labelling.

3 Principle

Measuring of the tensile strength and elongation at break and/or bursting volume and pressure of rubber condoms after conditioning the packages at an elevated temperature for a specified time.

4 Apparatus

- 4.1 Oven of either type specified in ISO 188.
- **4.2** Apparatus as specified in ISO 4074/9 and/or ISO 4074/6.

5 Preparation of test samples

5.1 Rubber condoms shall be conditioned in their original individual packages.

5.2 Condoms delivered in bulk shall be individually packed, with lubricant where appropriate, in the manner intended for supply to the consumer, before being tested in accordance with this International Standard. The packages shall be in accordance with ISO 4074/10.

6 Procedure

- **6.1** Condition the requisite number of unopened packages of rubber condoms in an oven (4.1) at 70 \pm 2 °C for 48 \pm 1 h.
- **6.2** After heating, keep the packages at 23 \pm 5 °C for at least 12 h but not more than 96 h.
- **6.3** Open the packages and examine conditioned condoms for tackiness, brittleness, or other signs of deterioration.
- **6.4** Within 96 h but not sooner than 12 h after conditioning at 70 °C, measure the tensile properties in accordance with ISO 4074/9 and/or bursting properties in accordance with ISO 4074/6.

7 Expression of results

Calculate and record the tensile strength and the elongation at break as described in ISO 4074/9 and/or record the bursting volume and pressure as described in ISO 4074/6.

8 Test report

The test report shall include the following particulars:

- a) identification of the sample;
- b) number of samples tested;
- c) description of any visible deterioration of rubber condoms after conditioning;
- d) values of the tensile strength, elongation at break and/or bursting pressure and bursting volume;
- e) date of testing.