



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS T 9111-6 : 2000

Rubber condoms—
Part 6 : Determination of bursting
volume and pressure

ICS 11.200

Descriptors : contraceptive sheaths, latices, burst tests

Reference number : JIS T 9111-6 : 2000 (E)



Documents

Document Sharing Hub

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry and Minister of Health and Welfare through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

JIS T 9111 *Rubber condoms* consists of the following parts.

- JIS T 9111-1 *Rubber condoms—Part 1 : Requirements*
- JIS T 9111-2 *Rubber condoms—Part 2 : Determination of length*
- JIS T 9111-3 *Rubber condoms—Part 3 : Determination of width*
- JIS T 9111-5 *Rubber condoms—Part 5 : Testing for holes—Water leak test*
- JIS T 9111-6 *Rubber condoms—Part 6 : Determination of bursting volume and pressure*
- JIS T 9111-7 *Rubber condoms—Part 7 : Oven conditioning*
- JIS T 9111-9 *Rubber condoms—Part 9 : Determination of tensile properties*
- JIS T 9111-10 *Rubber condoms—Part 10 : Packaging and labelling*

Date of Establishment: 2000-09-29

Date of Public Notice in Official Gazette: 2000-09-29

Investigated by: Japanese Industrial Standards Committee
Divisional Council on Medical and Safety

JIS T 9111-6:2000, First English edition published in 2001-08

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

© JSA 2001

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

Rubber condoms— Part 6 : Determination of bursting volume and pressure

Introduction This Japanese Industrial Standard has been prepared based on **ISO 4074-6 Rubber condoms—Part 6 : Determination of bursting volume and pressure** published in 1996 as the third edition by partially modifying the technical contents.

The portions underlined with dots in this Standard are the matters not included in the original International Standard.

1 Scope This part of **JIS T 9111** specifies the method of determining the bursting volume and pressure of rubber condoms.

Remarks : The following standard is the corresponding International Standard to this Standard.

ISO 4074-6 : 1996 *Rubber condoms—Part 6 : Determination of bursting volume and pressure* (MOD)

The symbols for indicating the degree of correspondence are IDT (identical), MOD (modified) and NEQ (not equivalent) as specified in **ISO/IEC Guide 21**.

2 Principle A specified length of the condom is inflated with air and the volume of air used for inflation and the pressure at the moment of bursting are recorded.

NOTE 1 Burst volume is the volume of air that has flowed into the condom until the moment of burst.

3 Apparatus Inflation apparatus, as shown in Fig. 1, suitable for inflating the condom with clean oil-free and moisture-free air at a specified rate, provided with equipment for measuring volume and pressure and having the features in **3.1** to **3.4**.

If an inflation cabinet is used, it is recommended that it have a window for viewing the condom during inflation, and that it be of sufficient size to allow the condom to expand freely without touching any part of the cabinet.

The construction should also be that the pressure in the cabinet during inflation becomes equal to the atmospheric pressure.

3.1 Pressure gauge, capable of measuring the pressure at burst of the condom to an accuracy of ± 0.05 kPa, configured such that there is no pressure differential between the condom and the pressure gauge.

3.2 Apparatus for recording the volume of inflation air, configured such that the volume of air is measured or calculated at the appropriate pressure within the condom and not at the line pressure which may be higher.

Whatever method is used to measure volume, it shall be accurate to ± 3 % for volume greater than 10 dm³.

3.3 Rod of suitable length, having a smooth sphere or hemisphere of 25 mm in diameter at its top for hanging the unrolled condom when fixed to the apparatus, and fixed in a position such that when the condom is clamped, the length of the condom remaining for inflation is $125 \text{ mm} \pm 2 \text{ mm}$.

3.4 Clamping ring, consisting of clamping collar and expansion cuff, and having no sharp edges or protrusions. The edge of the collar which touches the condom shall be smooth and have sufficient R.

The clamping ring should not stretch the condom as the clamping ring is placed onto its mount.

When used with an air-inflated cuff mount, the clamping ring should extend no more than approximately 3 mm above the air-inflated cuff, which should deflate to such a diameter that the condom freely rolls over it.