

# Australian Standard 1808—1980

---

## DIAPHRAGMS FOR CONTRACEPTIVE USE



**STANDARDS ASSOCIATION OF AUSTRALIA**

*Incorporated by Royal Charter*



THE FOLLOWING SCIENTIFIC, INDUSTRIAL, CONSUMER AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Department of Health  
Australian Federation of Consumer Organizations  
Canberra Consumers Inc.  
Confederation of Australian Industry  
National Biological Standards Laboratory  
Royal Australian College of General Practitioners  
Royal Australian College of Obstetricians and Gynaecologists  
State Departments of Health  
The Australian Federation of Family Planning Associations

---

This standard, prepared by Committee CS/9, Contraceptive Devices, was approved for publication on behalf of the Council of the Standards Association of Australia on 4 February 1980, and was published on 1 March 1980.

---

To keep abreast of progress in industry, Australian standards are subject to continuous review and are kept up-to-date by the issue of amendments or revised editions as necessary. It is important therefore that standards users ensure that their standards are up-to-date. Full details of all SAA publications will be found in the Annual List of Australian Standards; these details are supplemented by listings in the SAA monthly journal 'The Australian Standard'. Information on the Annual List and 'The Australian Standard' may be obtained from any sales office of the Association, where details are also available of the current status of individual standards. Suggestions for improvements to published standards, addressed to the head office of the Association, are welcomed.

**AUSTRALIAN STANDARD**

# **DIAPHRAGMS FOR CONTRACEPTIVE USE**

**AS 1808—1980**

First published .....	1975
Revised .....	1980

**PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA,  
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.**

**ISBN 0 7262 1860 X**

**19 FEB 1980**

## PREFACE

This standard was prepared by the Association's Committee on Contraceptive Devices and first published in 1975, following submissions from Canberra Consumers Inc., The Australian Federation of Family Planning Associations, and other organizations. The revision was undertaken at the request of the Australian Department of Health.

Vaginal diaphragms are packaged in a way which normally will protect them during storage. Nevertheless, some simple precautions are necessary to maintain quality after the products have left the manufacturer's control, and information in this regard is given in Appendix D.

It is strongly recommended that in view of the nature of this standard, manufacturers and purchasers should make use of the scheme operated by the Standards Association of Australia (see Note to Clause 9) whereby the product may bear the certification mark of the Standards Association of Australia.

This standard is largely based on BS 4028—1966, Diaphragms for Contraceptive Use.

This standard may require reference to the following standard:

AS CK15 Code of Recommended Practice for the Storage of Vulcanized Elastomers

## CONTENTS

	<i>Page</i>
<b>SPECIFICATION</b>	
1 Scope .....	3
2 Definitions .....	3
3 Materials .....	3
4 Design and Construction .....	3
5 Tests .....	3
6 Packing .....	4
7 Instructions for use .....	4
8 Information on Storage and the Use of Lubricants and Spermicidal Preparations .....	4
9 Marking .....	4
<b>APPENDICES</b>	
A Method for Measuring Thickness of Diaphragms .....	5
B Inflation Test .....	6
C Accelerated Ageing Test .....	7
D Notes on the Storage and Use of Rubber Diaphragms and the Use of Lubricants and Spermicidal Preparations .....	8

©Copyright — STANDARDS ASSOCIATION OF AUSTRALIA 1980

Users of standards are reminded that copyright subsists in all SAA publications. No part of this publication may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing of the Standards Association of Australia.

## STANDARDS ASSOCIATION OF AUSTRALIA

**Australian Standard**  
for  
**DIAPHRAGMS FOR CONTRACEPTIVE USE**

**1 SCOPE.** This standard specifies requirements for natural and synthetic rubber vaginal diaphragms for contraceptive use.

**NOTE:** The efficacy of spermicidal preparations and lubricants used with diaphragms is not within the scope of this standard.

**2 DEFINITIONS.** For the purpose of this standard, the following definitions apply:

**Diaphragm**—a natural or synthetic rubber vaginal diaphragm for contraceptive use, including any lubricant or dressing applied by the manufacturer.

**Rim, dome and spring**—parts of the diaphragm as indicated in Fig. 1.

**Nominal size**—the nominal external diameter of the rim of a diaphragm, as indicated in Fig. 1, expressed in millimetres.

**Useful life**—the period of time between the completion of manufacture of the diaphragm and the first appearance of any deterioration of the diaphragm.

**Unit pack**—the pack enclosing a single diaphragm.

**Primary pack**—the complete pack in which a diaphragm is to be supplied to the consumer, excluding any wrapping, bag, box, carton or similar article in which any complete pack is placed at the time of sale or despatch.

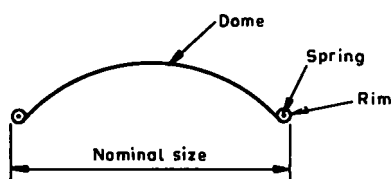


Fig. 1. COMPONENTS OF A DIAPHRAGM

### 3 MATERIALS.

**3.1 General.** The various components of diaphragms and any dressing materials used shall be manufactured from materials which are known to meet the requirements of Clauses 3.2 to 3.4.

**3.2 Dome and Rim.** The dome and rim shall be manufactured from filled or unfilled natural or synthetic rubber which contains no compound ingredient or pigment that might have a deleterious effect on the rubber used or liberate substances which are toxic or otherwise harmful under normal conditions of use.

**3.3 Spring.** The spring shall be made of a stainless steel which does not adversely affect the rubber or corrode when the diaphragm is stored and used under normal conditions throughout its useful life.

**3.4 Dressing Materials.** Dressing materials applied to the diaphragm shall not liberate substances which are either toxic or otherwise harmful under normal conditions of use or have a deleterious effect on the rubber.

### 4 DESIGN AND CONSTRUCTION.

**4.1 Size.** The external diameter of the diaphragm shall be measured at two positions at right angles to one another and neither measurement shall deviate from its nominal size by more than 2 mm.

**NOTE:** The preferred range of sizes is from 45 mm increasing by 5 mm intervals up to a maximum of 100 mm.

**4.2 Dome Thickness.** When measured in accordance with Appendix A, the thickness of the rubber of the dome shall not be less than 0.2 mm at any of the three places measured.

**4.3 Rim and Spring.** The rim of the diaphragm shall be reinforced with a stainless steel spring in the form of a ring which shall be of the helical wound type or of flat leaf or clock spring construction. The spring shall be completely covered by rubber.

### 5 TESTS.

#### 5.1 Spring Test.

**5.1.1 Test requirements.** When the diaphragm is tested in accordance with the procedure described in Clause 5.1.2—

- (a) the spring shall not project through the surface of the rim;
- (b) there shall be no deformation of the spring; and
- (c) there shall be no visible evidence of any other defects.

**5.1.2 Procedure.** The test procedure shall be as follows:

Compress the rim of the diaphragm so that opposite positions of the rim make contact. Release the pressure. Repeat these two steps a further 99 times over a period of 10 min.

**5.2 Inflation Test for Freedom from Defects.** When the diaphragm is tested in accordance with Appendix B, there shall be no pin-holes, thin spots, uncovered or protruding spring or any other defects of a visual or obvious nature likely to affect the safety of the user or the reliability of the diaphragm as a contraceptive.

**5.3 Accelerated Ageing Test.** When tested in accordance with Appendix C, the diaphragm shall not exhibit tackiness or significant change in the hardness of the rubber. After passing the accelerated ageing test, the diaphragm shall also pass the inflation test for freedom from defects described in Appendix B and the spring test described in Clause 5.1.