Under Revision
See DR93064

Superseded by AS/NZS 2496:1995

AS 2496—1981
UDC 615.471:616.089.5-78:621.415

also 615.471;
616-089.5

Australian Standard 2496—1981

BREATHING ATTACHMENTS FOR ANAESTHETIC PURPOSES FOR HUMAN USE

STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

F

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

Australian and New Zealand Intensive Care Society

Australian Chamber of Commerce

Australian Society of Anaesthetists

Confederation of Australian Industry

Metal Trades Industry Association of Australia

Royal Australasian College of Surgeons

State Departments of Health

This standard, prepared by Committee MD/7, Anaesthetic Equipment and Medical Breathing Machines, was approved on behalf of the Council of the Standards Association of Australia on 3 August 1981, and was published on 12 October 1981.

This standard was issued in draft form for public review as DR 79156.

AUSTRALIAN STANDARD

BREATHING ATTACHMENTS FOR ANAESTHETIC PURPOSES FOR HUMAN USE

AS 2496—1981

First published (as AS T37) .....1966 ✓
AS 2496 first published 1981

PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W. 2060

ISBN 0 7262 2370 0

PREFACE

This standard was prepared by the Association's Committee on Anaesthetic Equipment and Medical Breathing Machines. It supersedes AS T37—1966, Breathing Attachments for Anaesthetic Apparatus.

The standard relies heavily on work done in this area by BSI* and ISO/TC 121/SC 1† on specifications for breathing attachments for anaesthetic apparatus. Among a number of differences from ISO practice, this standard specifies the connection port for the reservoir bag on a circle absorber unit as female.

Although this standard specifies requirements for breathing attachments, it alone cannot ensure the satisfactory gas-tight seal required for safe anaesthesia, as the circuit is constructed of a variety of components outside the scope of this standard. It is therefore strongly recommended that all anaesthetic circuits should be pressure tested before use. A satisfactory result requires a leak of less than 1 L/min with a pressure of 4 kPa. A low pressure gauge with 22 mm conical tapers has been incorporated in circuits in Fig. B1(a) to illustrate this.

The standard describes two methods to reduce the risk of incorrect connection of circle system hoses, one by the use of male/female taper connections and the other by the use of colour coding.

The physical characteristics of plastics materials pose particular problems in that the dimensions of fittings may have to vary slightly from those specified for the metal components in order to make a satisfactory fit. A gauging test for conical fittings made of plastics materials is therefore included in this standard.

Several components of breathing systems, e.g. carbon dioxide absorbers and Ayres T-pieces, have a side arm to receive anaesthetic gases from the common gas outlet of an anaesthetic machine or other gas source. The dimensional requirements of these 'fresh gas inlets' are therefore also specified in this standard.

Provision is made for the 23 mm conical fittings for vaporizers which are *unsuitable* for use in the breathing system. Usually such vaporizers impose a high resistance.

This standard may require reference to the following standards:

AS 1721	General Purpose Metric Screw Threads
AS K185	Colours for Specific Purposes
BS 2050	Electrical Resistance of Conducting and Antistatic Products made from Flexible Polymeric Material.

*British Standards Institution.
†International Organization for Standardization.

CONTENTS