

Australian Standard™

**Laboratory glassware—Glass  
condensers with interchangeable  
ground glass joints**



This Australian Standard was prepared by Committee CH-001, Laboratory Glassware and Related Apparatus. It was approved on behalf of the Council of Standards Australia on 21 April 2006.  
This Standard was published on 15 May 2006.

---

The following are represented on Committee CH-001:

Australian Chamber of Commerce and Industry  
National Association of Testing Authorities Australia  
National Measurement Institute  
Royal Australian Chemical Institute  
Royal College of Pathologists of Australasia  
Science Industry Australia Inc  
University of New South Wales  
University of Sydney

---

### **Keeping Standards up-to-date**

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at [www.standards.com.au](http://www.standards.com.au) and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at [mail@standards.org.au](mailto:mail@standards.org.au), or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

---

*This Standard was issued in draft form for comment as DR 05386.*

Australian Standard™

**Laboratory glassware—Glass  
condensers with interchangeable  
ground glass joints**

Originated as AS 2406—1981.  
Second edition 2006.

**COPYRIGHT**

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 7404 0

## PREFACE

This Standard was prepared by the Standards Australia Committee CH-001, Laboratory Glassware and Related Apparatus to supersede AS 2406—1981, *Laboratory glassware—Glass condensers with interchangeable ground glass joints*.

The objective of this Standard is to ensure that the requirements for a series of typical glass condensers with interchangeable ground glass joints for general laboratory use are achieved.

The objective of this revision is to reconfirm the Standard with minor changes including the following:

- (a) Referenced documents have been updated.
- (b) The Standard has been brought into line with current editorial practices.

## CONTENTS

	<i>Page</i>
1 SCOPE.....	4
2 REFERENCED DOCUMENTS.....	4
3 TYPES OF CONDENSER.....	4
4 MATERIAL.....	4
5 CONSTRUCTION.....	5
6 DIMENSIONS.....	5
7 ANGLE DRIP END CONES .....	5

## STANDARDS AUSTRALIA

## Australian Standard

**Laboratory glassware—Glass condensers with interchangeable ground glass joints****1 SCOPE**

This Standard specifies requirements for a series of typical glass condensers with interchangeable ground glass joints suitable for general laboratory use.

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

AS	
2409	Interchangeable conical ground glass joints
2410	Interchangeable spherical ground glass joints
ISO	
3585	Borosilicate glass 3.3—Properties

**3 TYPES OF CONDENSER**

The following types of condenser are specified:

- (a) Air condenser—
  - (i) with cone and socket (see Figure 1)
  - (ii) with cone only (see Figure 2)
- (b) Liebig condenser
  - (i) with cone and socket (see Figure 3)
  - (ii) (see Figure 4)
  - (iii) with spherical cup only (see Figure 5)
- (c) Allihn (bulb) condenser—
  - (i) with external cone (see Figure 6)
  - (ii) with water-cooled cone (see Figure 7)
- (d) Graham (spiral) condenser—
  - (i) with cone and socket (see Figure 8)
  - (ii) with cone only (see Figure 9)
- (e) Davies (double-surface) condenser (see Figure 10)
- (f) Jacketed coil condenser (see Figure 11)
- (g) Inland revenue condenser (see Figure 12)

**4 MATERIAL**

Condensers shall be made of borosilicate glass 3.3 in accordance with ISO 3585. They shall be well annealed and shall be free from internal stress and visible defects.