# Australian Standard®

Medical refrigeration equipment—For the storage of blood and blood products

Part 1: Manufacturing requirements



This Australian Standard® was prepared by Committee HE-020, Medical Refrigeration. It was approved on behalf of the Council of Standards Australia on 18 October 2012. This Standard was published on 23 November 2012.

The following are represented on Committee HE-020:

- Australia and New Zealand Society of Blood Transfusion
- Australian College of Nursing
- Australian Council on Healthcare Standards
- Australian Institute of Refrigeration, Air-conditioning and Heating
- Australian Red Cross Blood Service
- CHOICE
- Institute of Hospital Engineering Australia
- National Association of Testing Authorities Australia
- National Blood Authority
- Queensland Health
- Refrigeration & Air-conditioning Contractors Association of Australia
- Royal College of Pathologists Australasia (RCPA)
- Therapeutic Goods Administration

This Standard was issued in draft form for comment as DR AS 3864.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

## Keeping Standards up-to-date

Australian Standards® are living documents that 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Standards may also be withdrawn.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 that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting www.standards.org.au

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

AS 3864.1—2012

## Australian Standard®

# Medical refrigeration equipment—For the storage of blood and blood products

## Part 1: Manufacturing requirements

Originated as part of AS 3864—1991. Previous edition part of AS 3864—1997. Revised in part and redesignated as AS 3864.1—2012.

### **COPYRIGHT**

© Standards Australia Limited

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, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 74342 292 2

#### **PREFACE**

This Standard was prepared by the Standards Australia Committee HE-020, Medical Refrigeration, to supersede part of AS 3864—1997, *Medical refrigeration equipment—For the storage of blood and blood products*.

The objective of this Standard is to safeguard recipients of blood transfusions by ensuring that blood and blood products are properly and safely stored at the required temperature in refrigeration equipment or walk-in rooms specifically manufactured for the purpose.

The Standard consists of two parts:

- Part 1: Manufacturing requirements (this Standard)
- Part 2: User-related requirements for care, maintenance, performance verification and calibration

The principle differences between this edition and the 1997 edition are as follows:

- (a) Separation of the Standard into two parts. Part 1 describes the requirements for manufacturers of medical refrigeration equipment used for storing blood and blood products. Part 2 is intended for the users of this type of equipment and describes the requirements for its care, maintenance, performance verification and calibration.
- (b) Recognition of the variety of data management technologies available for acquisition and storage of data from temperature recording devices.
- (c) Recognition of advancements in refrigeration system technology.

The term, 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

## CONTENTS

		Page
SECTION	ON 1 SCOPE AND GENERAL	
1.1	SCOPE	5
1.2	REFERENCED DOCUMENTS	5
1.3	DEFINITIONS	6
1.4	ELECTRICAL SAFETY	7
1.5	CARE AND MAINTENANCE	
1.6	MARKING	
SECTIO	ON 2 SELF-CONTAINED REFRIGERATION EQUIPMENT FOR THE STORAG	GE
OF BLO	OOD AND BLOOD PRODUCTS IN THE TEMPERATURE RANGE 2°C TO 6°C	
2.1	SCOPE OF SECTION	8
2.2	CONSTRUCTION	8
2.3	LIGHTING	9
2.4	REFRIGERATION SYSTEMS	
2.5	GENERAL CONDITIONS OF TESTING	
2.6	PERFORMANCE REQUIREMENTS	
2.7	INFORMATION TO BE SUPPLIED BY THE MANUFACTURER	
SECTION	ON 3 SELF-CONTAINED REFRIGERATION EQUIPMENT FOR THE STORAG	GE
	OOD PLASMA AND PLASMA PRODUCTS AT OR BELOW –25°C	_
3.1	SCOPE OF SECTION	12
3.2	CONSTRUCTION	
3.3	LIGHTING	
3.4	REFRIGERATION SYSTEM	
3.5	GENERAL CONDITIONS OF TESTING.	
3.6	PERFORMANCE REQUIREMENTS	
3.7	INFORMATION TO BE SUPPLIED BY THE MANUFACTURER	
SECTIO	ON 4 WALK-IN TYPE COOLROOMS FOR THE STORAGE OF BLOOD AND	
	D PRODUCTS IN THE TEMPERATURE RANGE 2°C TO 6°C	
4.1	SCOPE OF SECTION	17
4.2	CONSTRUCTION	
	LIGHTING	
4.4	REFRIGERATION SYSTEM	
4.5	GENERAL CONDITIONS OF TESTING	
	PERFORMANCE REQUIREMENTS	
4.7	INFORMATION TO BE SUPPLIED BY THE MANUFACTURER	
SECTIO	ON 5 WALK-IN TYPE FREEZER ROOMS FOR THE STORAGE OF BLOOD	
	MA AND PLASMA PRODUCTS AT OR BELOW –25°C	
5.1	SCOPE OF SECTION	23
5.2	CONSTRUCTION	
5.2	LIGHTING	
5.3 5.4	REFRIGERATION SYSTEM	
5.4	GENERAL CONDITIONS OF TESTING	
	PERFORMANCE REQUIREMENTS	
	INFORMATION TO BE SUPPLIED BY THE MANUFACTURER	
٠.,	- 1131 \$21\$1717 \$ 1 1\$213 1 \$2 1212 12521 1 121112 12 12 12 1 1 1 1 1	4 /



The is a new provider i arenade and chare publication at the limit below	This is a free preview.	Purchase the	entire publication	at the link below:
--	-------------------------	--------------	--------------------	--------------------

**Product Page** 

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation