

Australian/New Zealand Standard™

## Laundry practice

## **AS/NZS 4146:2000**

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This Joint Australian/ New Zealand Standard was prepared by Joint Technical Committee TX/16, Laundry Practice. It was approved on behalf of the Council of Standards Australia on 15 January 2000 and on behalf of the Council of Standards New Zealand on 5 January 2000. It was published on 23 February 2000.

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The following interests are represented on Committee TX/16:

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Australian Infection Control Association  
Australian Society for Microbiology  
Australian Wool Testing Authority  
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# Australian/New Zealand Standard™

## Laundry practice

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TX/16, Laundry Practice as a revision of AS 4146—1994, *Laundry practice*.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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## FOREWORD

Textile articles used in commercial, industrial, hospital and institutional organizations are subjected to repetitive laundry processes to remove soiling, staining and various contaminants which, if not removed, will result in the article being not only aesthetically unacceptable but also a theoretical health risk. Although laundry processes may include appropriate repair and maintenance of textiles to optimize textile life these features have not been addressed in this Standard.

Commercial and industrial laundries process work from a wide variety of end users including manufacturing, food processing, entertainment, catering, accommodation and health care providers. The risks associated with laundering hospital linen, quilts, curtains plastic sheeting and other textiles are generally identified, and appropriate procedures for handling the risks are widely used. The risks in the non-hospital area are not always identified. Risks to health from non-hospital laundry work may in fact be greater than that associated with hospital work. For example, items such as hotel and motel bed linen are not subject to the infection control procedures that apply in health care establishments following change of occupant; *Salmonella* infection is a risk in some food processing industries while many industrial garments are contaminated with a variety of harmful substances. Because of the potential risk, the requirements for infection control in laundries processing non-hospital linen should be as stringent as those for hospital laundries. Although soiled textile articles have been identified as a source of pathogenic micro-organisms, the risk of disease transmission is negligible if hygienic and commonsense storage and handling of clean and soiled articles is practised. In this regard, it is intended that standard precautions be applied to the handling of soiled articles. That is, it is to be assumed that *all* soiled articles are a potential source of infection and therefore appropriate precautions are to be applied including the use of protective attire.

The laundry industries in Australia and New Zealand are quite diverse and range from modest in-house laundries operated by small hotels and motels to very large linen service operations handling in excess of 200 tonnes per week.

The laundry industry can be divided into five major segments, viz. commercial, industrial, hospital, institutional and on-premises. An additional segment of the industry that is covered by this Standard includes the coin-operated laundries. These various segments of the laundry industry may be broadly described as follows:

(a) COMMERCIAL

Commercial laundries operate in the private sector and handle textiles from the following:

- (i) Hotels/motels.
- (ii) Restaurants.
- (iii) Shipping and transport.
- (iv) Domestic or private sources.
- (v) Nursing homes and hospitals.

The products serviced include—

- (A) sheets, pillow cases, towels, bedspreads, blankets, continuous towels, tea towels, table linen; and
- (B) personal clothing.

(b) INDUSTRIAL

Industrial laundries operate in the private sector and handle textiles from the following:

- (i) Factories and other industrial sources.
- (ii) Offices, supermarkets, retail stores.
- (iii) Service stations.

The products serviced include—

- (A) protective clothing, e.g. overalls, aprons, uniforms, gloves;
- (B) leather/plastic safety wares including gloves, helmets, dust control mats, dust control mops and cloths;
- (C) painters' drop cloths;
- (D) car seat covers; and
- (E) cleaning rags.

Such laundries operate in an environment which may include dry-cleaning as well as conventional laundering processes.

(c) HOSPITAL

Hospital laundries operate in health or health-related areas and handle textiles from the following:

- (i) Hospitals—private, public and extended care facilities.
- (ii) Clinics.
- (iii) Dental services.
- (iv) Nursing homes.
- (v) Mental health institutions.
- (vi) General health care centres.

The products processed may include various items including all of those items listed under 'commercial' and the following:

- (A) General ward linen.
- (B) Operating theatre textiles.
- (C) Specialized hospital requirements (e.g. limb bags, ward curtains).
- (D) Staff uniforms.
- (E) Patients' apparel.
- (F) Patients' personal clothing.

(d) INSTITUTIONAL

Institutional laundries operate in areas such as correctional institutions, remand centres and mental health institutions.

The products serviced may include those items contained in 'commercial' and 'hospital'.

(e) ON-PREMISES

On-premises laundries generally operate in the hotel/motel industry, nursing homes, private hospitals and in the manufacturing industry. These laundries provide a service for their own internal use.

(f) COIN-OPERATED

Coin-operated laundries are in a somewhat different category of laundry to the previously mentioned laundries. Although coin-operated laundries are generally intended for use by householders and small commercial operators (e.g. serviced units, boarding house operators), because of time constraints they are also sometimes used by the larger commercial operators who should use the commercial laundries. Accordingly, to ensure that the end result from these laundries is of a similar quality to other commercial laundries, coin-operated laundries have been included in the Scope of this Standard.

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard**  
**Laundry practice**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard specifies general laundry practice requirements and recommendations for commercial, industrial, hospital, institutional, on-premise and coin-operated laundries, as well as minimum performance requirements which are to be attained in order to provide an acceptable level of service.

**1.2 OBJECTIVE**

This Standard is intended to provide laundry operators as well as their clients with a common reference for acceptable laundry performance.

**1.3 REFERENCED AND RELATED DOCUMENTS****1.3.1 Referenced documents**

The following documents are referred to in this Standard:

## AS

1169	Minimizing of combustion hazards arising from the medical use of flammable anaesthetic agents
2001	Methods of test for textiles
2001.1	Part 1: Conditioning procedures
2001.2.3	Method 2.3: Physical tests—Determination of breaking force and extension of textiles fabrics
2001.3.6	Method 3.6: Chemical tests—Determination of cuprammonium fluidity of cotton and cellulosic man-made fibres
3789	Textiles for health care facilities and institutions
3789.4	Part 4: Wool blankets
3789.5	Part 5: Wool blankets—Laundering procedures
4480	Textiles for health care facilities and institutions—Medical sheepskins
4480.1	Part 1: Product specification and testing

## AS/NZS

1957	Textiles—Care labelling
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## ISO

2267	Surface active agents—Evaluation of certain effects of laundering—Methods of preparation and use of unsoiled cotton control cloth
4312	Surface active agents—Methods of analysis and test for unsoiled cotton control cloth

**1.3.2 Related documents**

Attention is drawn to the following related documents: