STANDARDS
NEW ZEALAND
PAEREWA AOTEAROA

NZS 5823:2005

Incorporating Amendment No. 1

New Zealand Standard

Specification for Buoyancy Aids and Marine Safety Harnesses and Lines

Superseding NZS 5823:2001

NZS 5823:2005

COMMITTEE REPRESENTATION

This Standard was prepared under the supervision of the Buoyancy Aids and Marine Safety Harnesses and Lines Committee (P 5823) for the Standards Council, established under the Standards Act 1988.

The committee consisted of representatives of the following:

Bureau Veritas NZ Ltd
Coastguard New Zealand
Hutchwilco Ltd
Maritime Safety Authority of New Zealand
RFD New Zealand Ltd
Rhumbline Ltd
Safety at Sea (Australasia) Ltd
Water Safety New Zealand

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AMENDMENTS

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REFERENCED DOCUMENTS

Reference is made in this document to the following:

NEW ZEALAND STANDARD

NZS 5432:1990	Webbing for restraining devices for occupants of motor vehicles

AMERICAN STANDARDS

ASTM C 177 – 04	Standard test method for steady-state heat flux measurements and thermal transmission properties by means of the guarded-hot-plate apparatus
ASTM C 518 – 04	Standard test method for steady-state thermal transmission properties by means of the heat flow meter apparatus
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AUSTRALIAN STANDARDS

AS 1192:2004	Electroplated coatings – Nickel and chromium
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AS 2001: - - - -	Methods of test for textiles
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BS EN ISO 2411:2000	Rubber or plastics-coated fabrics. Determination of coating adhesion
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BS 2782:- - - -	Methods of testing plastics
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BS 3146:- - - -	Investment castings in metal
Part 1:1974	Carbon and low alloy steels
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BS 3424:- - - -	Testing coated fabrics
Part 5:1982	Methods 7A, 7B and 7C. Methods for determination of tear strength (Part 5 is now partially replaced by BS EN ISO 4674.1:2003 Rubber- or plastics-coated fabrics. Determination of tear resistance. Constant rate of tear methods
Part 12:1996	Testing coated fabrics. Acclerated ageing process
Part 22:1983	Method 25. Methods for determination of fusion of PVC coatings and the state of cure of vulcanized rubber coatings
BS 3870:- - - -	Stitches and seams
Part 1:1991	Classification and terminology of stitch types
BS EN 12373.1:2001	Aluminium and aluminium alloys. Anodizing. Method for specifying decorative and protective anodic oxidation coatings on aluminium

ISO STANDARDS

ISO 2411:2000	Rubber – or plastics-coated fabrics – Determination of coating adhesion
ISO 7854:1995	Rubber – or plastics-coated fabrics – Determination of resistance to damage by flexing
ISO 9227:1990	Corrosion tests in artificial atmospheres – Salt spray tests

NEW ZEALAND LEGISLATION

Maritime Rules made under the Maritime Transport Act 1994

OTHER PUBLICATIONS

CIE publication 39.2:1983 Recommendations for surface colours for visual signalling

International Maritime Organization Resolution A.658(16) 20 November 1989, Annex, Type I and Type II Classification

LATEST REVISIONS

The users of this Standard should ensure that their copies of the above-mentioned New Zealand Standards and referenced overseas Standards are the latest revisions or include the latest amendments. Such amendments are listed in the annual Standards New Zealand *Catalogue* which is supplemented by lists contained in the monthly magazine *Standards Update* issued free of charge to committee and subscribing members of Standards New Zealand.

REVIEW OF STANDARDS

Suggestions for improvement of this Standard will be welcomed. They should be sent to the Chief Executive, Standards New Zealand, Private Bag 2439, Wellington 6020.

FOREWORD

This Standard is a revision of NZS 5823:2001 *Specification for buoyancy aids and marine safety harnesses and lines*. All Standards are revised periodically as the need arises. This revision was initiated in response to concerns being raised in the sector that existing buoyancy aids were not always accompanied by enough information to ensure purchasers were able to select the most appropriate device for their intended use. In addition, this provided an opportunity to consider other international improvements and changes in the production of buoyancy aids, safety harnesses and lines. These included:

- Significant changes to the labelling requirements and the information required on swing tags – specifically in relation to what a jacket will or will-not do, as well as fitting and sizing instructions (including chest size in addition to weight);
- The ability to attach crotch straps to adult buoyancy aids accompanied by a recommendation that using these will reduce the risk of jackets riding up;
- That in-shore waters lifejackets (402s) should no longer be referred to as life jackets, but as personal flotation devices (PFDs), and should also carry appropriate warnings.

Also included was formalizing the current certification requirement to include 10 % more buoyancy material than specified, as a quality assurance buffer to compensate for variance in inherent buoyancy material batch consistency.

This Standard is intended to serve as a guide to manufacturers, purchasers and users of such safety equipment in ensuring that the equipment provides an effective standard of performance in use. Equally essential is the need for the designer to encourage the wearing of the equipment by making it comfortable and attractive for continuous wear, either on or near water, rather than for it to be stowed in a locker for emergency use.

This Standard provides a means of classifying the different types of buoyancy aids, and sets out minimum buoyancy requirements for each type of aid. Both the buoyancy and the classification are required to be marked on each type of buoyancy aid. In this way the consumer will be able to identify the required buoyancy aid. For instance, if a buoyancy aid is marked, 'IN-SHORE WATERS PERSONAL FLOTATION DEVICE', the user will know that this is an aid for persons who anticipate an early rescue, and need an aid to help maintain a safe floating position.

Also included in this Standard is a specification for marine safety harnesses and safety lines. Both a child's and an adult's size are specified, with a performance test using a specified dummy for each.

This Standard is based on Australian, European and CEN (European Committee for Standardization) Standards.

This revision highlighted an issue in relation to the use of buoyancy devices by kayakers. Kayaking buoyancy aids are often produced by specialist manufactures to meet the specific needs of the wide range of water environments utilized by kayakers. As a consequence, manufacturers are not always able to produce these devices in compliance with the current requirements of NZS 5823 – due to a number of factors including colour, design and buoyancy specifications. The specialist personal flotation devices section (406) has been amended to address these issues.

The Maritime Safety Authority of New Zealand has also recognized this issue and is working with the kayaking industry to put a solution in place.

In recognition of the significant changes between this edition of NZS 5823 and the previous, a transition period of six months from the public availability of this document is required to allow manufacturers and testing authorities to update their processes in order to meet compliance requirements.

NZS 5823:2001 (superseded) will remain current until the end of 2005.

NOTES