



# Lifejackets

Part 2: Materials and components — Requirements and test methods



#### AS 4758.2:2022

Transport for NSW

VicLab (Testing Interests Australia)

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Part 2: Materials and components — Requirements and test methods

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### **Preface**

This Standard was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee CS-060, Lifejackets and Personal Safety Equipment for Small Craft, to supersede AS 4758.2:2015.

AS 4758.2:2015 will also remain current for 12 months after the date of publication of this document and after this time it will be superseded by AS 4758.2:2022. Regulatory authorities that reference this Standard in regulation may apply these requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements.

The objective of this document is to provide manufacturers with the requirements and test methods for the materials and components for use in the construction of lifejackets [also known as "personal flotation devices" (PFDs)].

The major changes in this edition are as follows:

- (a) Accelerated weathering.
- (b) Foam floatation material.
- (c) Inflation systems for lifejackets.

This document is Part 2 of the following series:

AS 4758.1, Lifejackets, Part 1: General requirements

AS 4758.2, *Lifejackets, Part 2: Materials and components — Requirements and test methods* (this document)

AS 4758.3, Lifejackets, Part 3: Test methods

This document is based on but not equivalent to ISO 12402-7:2020, *Personal flotation devices, Part 7: Materials and components* — *Safety requirements and test methods*. Content from this Standard has been reproduced with the permission of ISO. The International Standard is available from SAI Global. Copyright remains with ISO.

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.

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## Australian Standard®

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### **Section 1** Scope and general

#### **1.1 Scope**

This document specifies the requirements for the structural materials and components and test methods for the construction of lifejackets.

#### 1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

AS 4758.1, Lifejackets, Part 1: General requirements

AS 4758.3, Lifejackets, Part 3: Test methods

ISO 139, Textiles — Standard atmospheres for conditioning and testing

ISO 188, Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests

ISO 1421, Rubber- or plastics-coated fabrics — Determination of tensile strength and elongation at break

ISO 1926, Rigid cellular plastics — Determination of tensile properties

ISO 2062, Textiles — Yarns from packages — Determination of single-end breaking force and elongation at break using constant rate of extension (CRE) tester

ISO 2411, Rubber- or plastics-coated fabrics — Determination of coating adhesion

ISO 3696, Water for analytical laboratory use — Specification and test methods

ISO 4674-1, Rubber- or plastics-coated fabrics — Determination of tear resistance — Part 1: Constant rate of tear methods

ISO 4892-1, Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance

ISO 4892-2, Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps

ISO 5470-2, Rubber- or plastics-coated fabrics — Determination of abrasion resistance — Part 2: Martindale abrader

ISO 7229, Rubber- or plastics-coated fabrics — Measurement of gas permeability

ISO 7854, Rubber- or plastics-coated fabrics — Determination of resistance to damage by flexing

ISO 9073-4, Nonwovens — Test methods— Part 4: Determination of tear resistance by the trapezoid procedure

ISO 9227, Corrosion tests in artificial atmospheres — Salt spray tests

ISO 13934-1, Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method

ISO 13934-2, Textiles — Tensile properties of fabrics — Part 2: Determination of maximum force using the grab method