



ISO 15027-2

Immersion suits —

**Part 2:
Safety and performance
requirements for abandonment
suits**

Combinaisons d'immersion —

*Partie 2: Exigences de sécurité et de performance pour les
combinaisons d'abandon*

**Third edition
2026-04**

This is a preview of ISO 15027-2:2026. Click [here](#) to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2026

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

This is a preview of ISO 15027-2:2026. [Click here to purchase the full version from the ANSI store.](#)

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Requirements and guidance	4
4.1 General.....	4
4.2 Basic health and ergonomic requirements.....	5
4.2.1 Innocuousness.....	5
4.2.2 Design.....	5
4.2.3 Comfort.....	5
4.3 Accessories.....	6
4.4 Buddy lines.....	6
4.5 Conspicuity.....	6
4.5.1 Colour.....	6
4.5.2 Retro-reflective material.....	8
4.5.3 Emergency-position-indicating lights.....	8
4.6 Foam flotation material.....	8
4.7 Flammability.....	8
4.8 Temperature cycling.....	8
4.9 Water ingress.....	8
4.10 Thermal protection in water.....	8
4.11 Performance requirements.....	9
4.11.1 Donning.....	9
4.11.2 Walking.....	9
4.11.3 Climbing.....	9
4.11.4 Dexterity and mobility.....	10
4.11.5 Hand protection.....	10
4.11.6 Jump test.....	10
4.11.7 Swim and boarding.....	10
4.11.8 Flotation and righting.....	10
4.11.9 Field of vision.....	10
4.12 Requirements on materials, fabrics and components.....	10
4.12.1 Fuel resistance.....	10
4.12.2 Tensile strength of seams.....	10
4.12.3 Coated fabrics.....	11
4.12.4 Other fabrics.....	11
4.12.5 Metal components.....	11
4.13 Strength.....	12
5 Marking	12
6 Information supplied by the manufacturer	13
7 Consumer information at point of sale	14
7.1 Data list.....	14
7.2 Consumer information label.....	15
Annex A (informative) Information for manufacturers, users, regulators and industrial inspectors about immersion suits on the application of thermal protection times relevant to the ISO 15027 series	16
Bibliography	19

This is a preview of ISO 15027-2:2026. [Click here to purchase the full version from the ANSI store.](#)

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 188, *Small craft*, Subcommittee SC 1, *Personal safety equipment*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 162, *Protective clothing including hand and arm protection and lifejackets*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 15027-2:2012), which has been technically revised.

The main changes are as follows:

- the terms and definitions have been revised;
- in [Table 3](#), a new thermal performance level E, equivalent to SOLAS uninsulated immersion suit has been added;
- in [Table 3](#), minimum immersed clo values to suit performance levels have been added;
- in [Clause 5](#), warnings in marking have been revised;
- in [Clause 7](#), the consumer information has been revised;
- [Annex A](#) has been revised.

A list of all parts in the ISO 15027 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This is a preview of ISO 15027-2:2026. [Click here to purchase the full version from the ANSI store.](#)

This document has been prepared to meet the needs of persons engaged in certain activities on or near water.

Abandonment suits manufactured and maintained according to this document will provide protection from cold shock and delay the onset of hypothermia.

The complete immersion system (suit and clothes worn under the suit) is intended to keep the user alive long enough for the rescue services to find and recover them. An individual's estimated thermal protection time depends on water temperature and wave state as well as their physiology. This document provides the minimum recommended insulation levels and the associated water temperatures in which the suits are to be used.

This document is intended to serve as a minimum performance requirement for manufacturers, purchasers and users of such safety equipment and seeks to ensure that the equipment provides effective performance in use. The abandonment suit is not intended to jeopardize safety by causing undue discomfort which can result in a degradation of performance.

The abandonment suit is not intended to have any features which can have a detrimental effect on the operation of other life-saving equipment. In particular, any part of the suit which might pose a snagging hazard is intended to be suitably covered, protected or restrained.

The primary aims in wearing an abandonment suit are:

- a) to reduce the risk of cold shock and delay the onset of hypothermia;
- b) to enable users to propel themselves in the water and extricate themselves from the water without it becoming an encumbrance;
- c) to make users sufficiently conspicuous in the water so as to aid their recovery.

The performance of the suit may be altered by a number of factors, including wave action or the wearing of additional equipment. Users, owners and employers should ensure that equipment is correctly maintained according to the manufacturer's instructions.

A suit system may comprise one or more pieces provided that in all cases it meets the requirements of this document as a complete system.

An abandonment suit may often be worn with a lifejacket as it will provide flotation and can help to bring a user to a face-up position.