

Tuukriülikonnad. Osa 2: Kuivad kummiülikonnad, nõuded ja katsemeetodid

Diving suits - Part 2: Dry suits, requirements and test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14225-2:2005 sisaldab Euroopa standardi EN 14225-2:2005 ingliskeelset teksti. Käesolev dokument on jõustatud 30.05.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 14225-2:2005 consists of the English text of the European standard EN 14225-2:2005. This document is endorsed on 30.05.2005 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This European Standard specifies the minimum requirements for the construction, performance, safety, test methods, marking, labelling, user's instructions, and information prior to purchase information of a dry suit for underwater activities where the user is breathing underwater	Scope: This European Standard specifies the minimum requirements for the construction, performance, safety, test methods, marking, labelling, user's instructions, and information prior to purchase information of a dry suit for underwater activities where the user is breathing underwater
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ICS 97.220.40

Võtmesõnad: instructions, mechanical, occupational safety, operating requirements, protective clothing, recreational equipment, resistance, safety, safety engineering, safety requirements, specification (approval), specifications, sports equipment, sportswear, test benches, testing

ICS 97.220.40

English version

Diving suits - Part 2: Dry suits - Requirements and test methods

Vêtements de plongée - Partie 2 : Combinaisons étanches
- Prescriptions et méthodes d'essai

Tauchanzüge - Teil 2: Trockentauchanzüge -
Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 14 February 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 14225-2:2005) has been prepared by Technical Committee CEN/TC 162 "Protective clothing including hand and arm protection and lifejackets", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2005, and conflicting national standards shall be withdrawn at the latest by September 2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 89/686/EEC.

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This standard for dry suits is Part 2 of 4. The other parts are:

- Diving Suits – Part 1: Wet suits – Requirements and test methods.
- Diving Suits – Part 3: Actively heated or cooled suits (systems) – Requirements and test methods.
- Diving Suits – Part 4: One atmosphere suits (ADS) – Human factors requirements and test methods.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This document for dry diving suits has been prepared to meet the needs of persons engaged in underwater activities where the user is breathing underwater, and where thermal comfort and required thermal protection is higher than that provided by a wet suit. A dry suit is also designed to enable the wearers to maintain their buoyancy and to adjust the gas volume in the suit according to their requirements.

A dry suit may be comprised of one or more pieces. Dry suits may be used in conjunction with a range of accessories including passive and active undergarments, gloves, a hood and other head protection equipment.

The conformity of a dry suit to this document does not imply that it is suitable for all circumstances, nor does the standard make detailed provisions for all the special uses for which dry suits may be utilised.

A dry suit manufactured for special purposes may also:

- a) provide or enable thermal insulation;
- b) provide special protection.

The level of protection and performance offered by a dry suit may be altered by a number of factors, including the water temperature, the depth of the dive, the diver's work rate and behaviour, and the manner in which the suit has been maintained. The adequacy of the protection provided by a dry suit also depends upon the individual diver's level of cold tolerance. The degree of thermal protection offered by a dry suit is especially problematic. Appropriate material and manikin tests are being developed and refined, but at best they will only be able to provide broad indications of the likely protection provided by a particular suit to an individual diver.

1 Scope

This document specifies the construction and performance, of dry suits for wear by divers for underwater activities where the user is breathing underwater. Marking, labelling, information to be provided at the point of sale, and instructions for use are also specified.

Laboratory and practical performance tests are specified.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 250:2000, *Respiratory equipment — Open-circuit self-contained compressed air diving apparatus — Requirements, testing, marking*

EN 340:2003, *Protective clothing — General requirements*

EN 1809:1997, *Diving accessories — Buoyancy compensators — Functional and safety requirements, test methods*

EN 14225-1:2005, *Diving suits — Requirements and test methods*

EN 14126:2003, *Protective clothing — Performance requirements and test methods for protective clothing against infective agents*

EN 23758:1993, *Textiles — Care labelling code using symbols (ISO 3758:1991)*

EN ISO 105-E02:1996, *Textiles — Tests for colour fastness — Part E02: Colour fastness to sea water (ISO 105-E02:1994)*

EN ISO 105-X12:2002, *Textiles — Tests for colour fastness — Part X12: Colour fastness to rubbing (ISO 105-X12:2001)*

EN ISO 6529:2001, *Protective clothing — Protection against chemicals — Determination of resistance of protective clothing materials to permeation by liquids and gases (ISO 6529:2001)*

EN ISO 13935-2:1999, *Textiles — Seam tensile properties of fabrics and made-up textile articles — Part 2: Determination of maximum force to seam rupture using the grab method (ISO 13935-2:1999)*

EN ISO 13995:2000, *Protective clothing — Mechanical properties — Test method for the determination of the resistance to puncture and dynamic tearing of materials (ISO 13995:2000)*

EN ISO 15027-3:2002, *Immersion suits — Part 3: Test methods (ISO 15027-3:2002)*

ISO 105-A02:1993, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour*

ISO 1817:1999, *Rubber, vulcanized — Determination of the effects of liquids*

SOLAS:1974, as amended, *Chapter III as amended by IMO Resolution MSC 47(66) and LSA Code. Recommendation on retroreflective tapes on life-saving appliances adopted by Res. A.658(16), Annex 2, issued by the International Maritime Organisation (IMO)*