



SLOVENSKI STANDARD
oSIST prEN ISO 24231:2023

01-marec-2023

Varovalna obleka - Zaščita pred dežjem - Metoda preskušanja za že izdelana oblačila glede učinka kapljic, ki z veliko energijo padajo od zgoraj (ISO/DIS 24231:2023)

Protective clothing - Protection against rain - Test method for ready-made garments against high energy droplets from above (ISO/DIS 24231:2023)

Schutzkleidung - Schutz gegen Regen - Prüfverfahren für fertige Bekleidungssteile gegen Tropfen von hoher Energie von oben (ISO/DIS 24231:2023)

Habillement de protection - Protection contre la pluie - Méthode d'essai pour les vêtements prêts à porter contre l'impact de fortes précipitations (ISO/DIS 24231:2023)

Ta slovenski standard je istoveten z: prEN ISO 24231

ICS:

13.340.10	Varovalna obleka	Protective clothing
59.080.01	Tekstilije na splošno	Textiles in general

oSIST prEN ISO 24231:2023

en,fr,de

DRAFT INTERNATIONAL STANDARD

ISO/DIS 24231

ISO/TC 94/SC 13

Secretariat: SNV

Voting begins on:
2023-01-12Voting terminates on:
2023-04-06

Protective clothing — Protection against rain — Test method for ready-made garments against high-energy droplets from above

Habillement de protection - Protection contre la pluie - Méthode d'essai pour les vêtements prêts à porter contre l'impact de fortes précipitations

ICS: 13.340.10

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[oSIST prEN ISO 24231:2023](https://standards.iteh.ai/catalog/standards/sist/bdabfd3c-649d-494d-b2fe-e5afef7c9ea0/osist-pren-iso-24231-2023)

<https://standards.iteh.ai/catalog/standards/sist/bdabfd3c-649d-494d-b2fe-e5afef7c9ea0/osist-pren-iso-24231-2023>

This document is circulated as received from the committee secretariat.

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

ISO/CEN PARALLEL PROCESSING



Reference number
ISO/DIS 24231:2023(E)

© ISO 2023

iTeh STANDARD PREVIEW (standards.iteh.ai)

[oSIST prEN ISO 24231:2023](https://standards.iteh.ai/catalog/standards/sist/bdabfd3c-649d-494d-b2fe-e5afef7c9ea0/osist-pren-iso-24231-2023)

<https://standards.iteh.ai/catalog/standards/sist/bdabfd3c-649d-494d-b2fe-e5afef7c9ea0/osist-pren-iso-24231-2023>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2023

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

Contents

	Page
Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Principle.....	1
5 Test device.....	3
5.1 Tower device.....	3
5.2 Thermometers.....	3
5.3 Manikin.....	3
5.4 Underwear to fit manikin.....	3
5.5 Optional humidity sensor.....	3
6 Dressing and positioning the manikin.....	4
7 Test procedure.....	5
8 Test report.....	5
Annex A (informative) General background to the rain simulation.....	6
Annex B (normative) Absorbency of bleached textiles.....	7
Bibliography.....	9

(standards.iteh.ai)

[oSIST prEN ISO 24231:2023](https://standards.iteh.ai/catalog/standards/sist/bdabfd3c-649d-494d-b2fe-e5afef7c9ea0/osist-pren-iso-24231-2023)

<https://standards.iteh.ai/catalog/standards/sist/bdabfd3c-649d-494d-b2fe-e5afef7c9ea0/osist-pren-iso-24231-2023>

ISO/DIS 24231:2022(E)

Foreword

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 documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 94, Personal safety – Personal protective equipment, Subcommittee SC 13, Protective clothing.

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.

Introduction

This document (ISO DIS 24231: 2022) specifies a test method for determining the rain tightness of clothing for protection against rain, using a static manikin exposed to artificial rain. It is applicable to the testing of jackets, trousers, coats and one- or two-piece suits.

This document is not applicable to the testing of garments for resistance to other weather conditions, e.g. snow, hail-, or strong winds.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[oSIST prEN ISO 24231:2023](https://standards.iteh.ai/catalog/standards/sist/bdabfd3c-649d-494d-b2fe-e5afef7c9ea0/osist-pren-iso-24231-2023)

<https://standards.iteh.ai/catalog/standards/sist/bdabfd3c-649d-494d-b2fe-e5afef7c9ea0/osist-pren-iso-24231-2023>

Protective clothing — Protection against rain — Test method for ready-made garments against high-energy droplets from above

1 Scope

This document specifies a test method for determining the liquid tightness of clothing for protection against rain, using a static manikin exposed to large amount of high energy droplets from above. It is applicable to the testing of jackets, trousers, coats and one- or two-piece suits.

This document is not applicable to the testing of garments for resistance to other weather conditions, e.g. snow, hail-, or strong winds.

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. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/DIS 11610, *Protective clothing — Vocabulary*

3 Terms and definitions

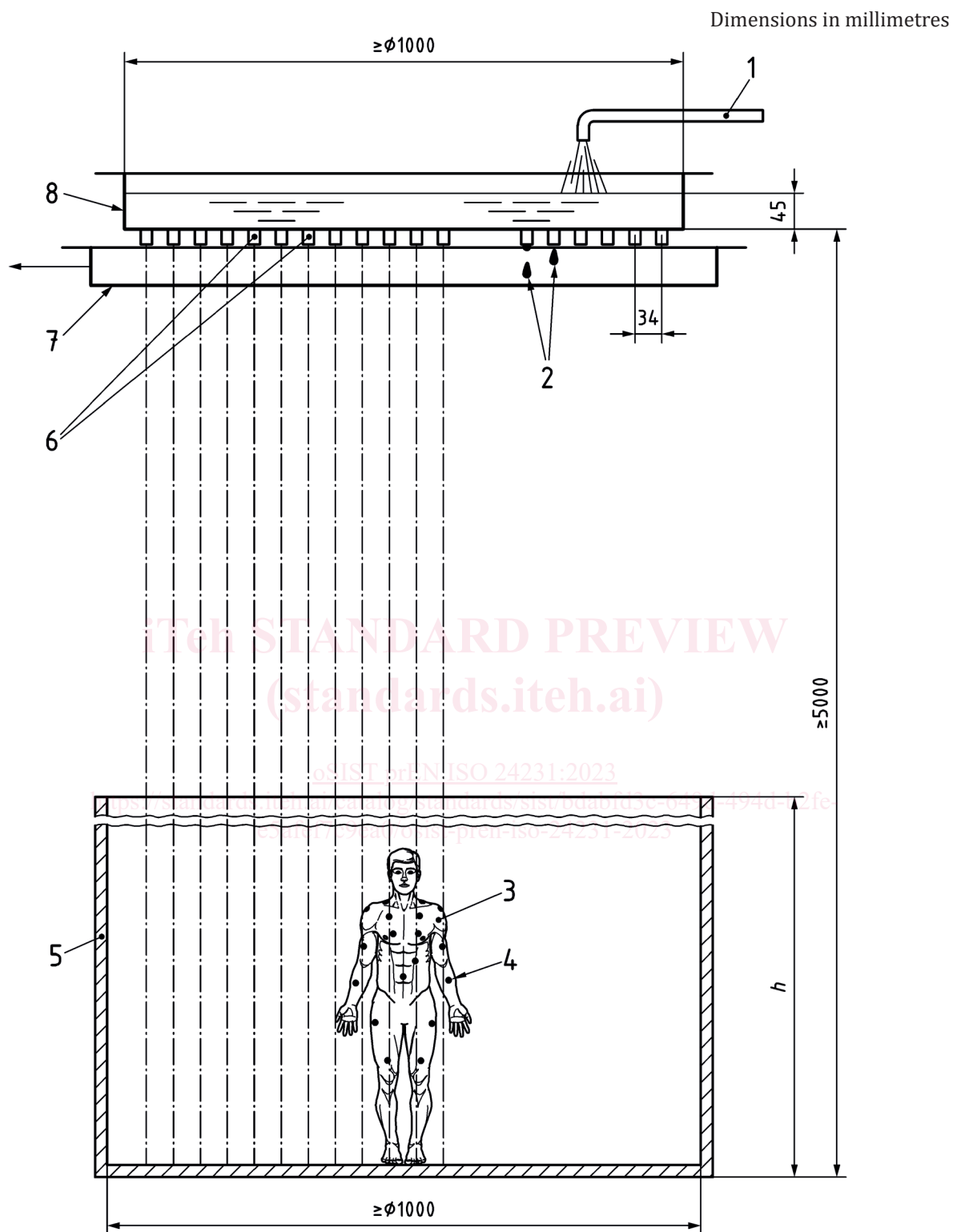
For the purposes of this document, the terms and definitions given in ISO 11610 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Principle

A manikin with the shape and size of an adult person wearing long underwear made of absorbent fabric is dressed in the protective garment to be tested and exposed to large amount of high energy droplets from above for a specific period. After the exposure the underwear and the inner side of the protective garment are visually inspected for wet areas. In addition, sensors on the manikin may be used in order to detect the timing of water ingress at individual sites.



Key

- | | | | |
|---|--------------------|---|---------------|
| 1 | water filling pipe | 6 | nozzles |
| 2 | droplets | 7 | movable tube |
| 3 | manikin | 8 | water tub |
| 4 | sensors | 9 | overflow pipe |
| 5 | protection wall | | |

Figure 1 — Example of a tower device