International

ISO 13997

Protective clothing — Mechanical properties — Determination of resistance to cutting by sharp objects

Habillement de protection — Propriétés mécaniques — Détermination de la résistance à la coupure par des objets tranchants

Third edition
2024-10

Reference number
ISO 13997:2024(en)

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Published in Switzerland

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This document was prepared by Technical Committee ISO/TC 94, *Personal safety — Personal protective equipment*, Subcommittee SC 13, *Protective clothing*, 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 13997:2023), of which it constitutes a minor revision.

The main changes are as follows:

— Figure 7 a) was replaced;

— Footnote 2 was moved to the Figure 7 title;

— the Excel file that can be downloaded using the link in the note to Table B.2 was replaced (there was a correction because in few specific cases Excel did not work as planned).

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Although textiles, composites, leather, rubbers and reinforced materials may resist cutting by sharp edges in different ways, a test method for evaluating the resistance to cut of materials in protective clothing should be applicable to all materials. The test described in this document provides a method that allows calculations of the downwards (normal) force required to cause a blade drawn across the sample for a fixed distance to cut through the specimen.

The performance of protective clothing materials may be classified using the numerical values obtained from this test.