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Protective clothing — Test methods for clothing providing protection against chemicals —

Part 4:

Determination of resistance to penetration by a spray of liquid (spray test)

Vêtements de protection — Méthodes d'essai pour les vêtements fournissant une protection contre les produits chimiques —

Partie 4: Détermination de la résistance à la pénétration par vaporisation de liquide (essai au brouillard)



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Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 17491-4 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 162, *Protective clothing including hand and arm protection and lifejackets*, in collaboration with Technical Committee ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 13, *Protective clothing*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 17491-4, together with ISO 17491-3, cancels and replaces ISO 17491:2002, Clauses 6 and 7 of which have been technically revised.

ISO 17491 consists of the following parts, under the general title *Protective clothing* — *Test methods for clothing providing protection against chemicals*:

- Part 3: Determination of resistance to penetration by a jet of liquid (jet test)
- Part 4: Determination of resistance to penetration by a spray of liquid (spray test)

The following parts are under development:

- Part 1: Determination of resistance to outward leakage of gases (internal pressure test)
- Part 2: Determination of resistance to inward leakage of aerosols and gases (inward leakage test)

Introduction

This part of ISO 17491 describes a test method for determining the spray penetration resistance of chemical protective clothing Type 4 (with spray-tight connections between different parts of the clothing and, if applicable, between the clothing and other items of personal protective equipment) and Type 6 (limited performance protective clothing).

Such clothing comprises one or more items covering the full surface of the body and is intended to be worn under conditions where there is a risk of exposure to a spray of a liquid chemical. Other requirements with regard to this type of clothing and its constituent materials can be found in the respective product standards (see Bibliography [4]).

Interlaboratory testing has shown that this test method is a repeatable pass/fail method.

A document on the selection, use and maintenance of chemical protective clothing is available (see Bibliography [5]).

CAUTION — Some of the procedures specified in this part of ISO 17491 involve the use of processes which could lead to hazardous situations and hence appropriate precautions should be taken.