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**AMENDMENT 1**  
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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)**

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**AMENDMENT 1**

[ISO 17491-4:2008/Amd.1:2016](https://standards.iteh.ai/standards/ISO/17491-4:2008/Amd.1:2016)

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*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)*

*AMENDEMENT 1*



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Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
copyright@iso.org  
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The committee responsible for this document is ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 13, *Protective clothing* and by Technical Committee CEN/TC 162, *Protective clothing including hand and arm protection and lifejackets* in collaboration.

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## Introduction

This amendment is intended to update 8.2 to allow better calibration of the test method and to ensure only SI-Units are used in this part of ISO 17491.

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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)

### AMENDMENT 1

*Subclause 8.1, 2<sup>nd</sup> paragraph, last sentence*

Replace:

“Therefore, an opening valve, which opens at  $(3_{-0}^{+0,5})$  bar, should be used.”

by:

“Therefore, an opening valve, which opens at  $(300_{-0}^{+50})$  kPa, shall be used.”

*Subclause 8.1, NOTE 2, 1<sup>st</sup> sentence*

Replace:

“Minor adjustments to obtain the required output can be made by increasing or decreasing the pressure at each nozzle by a maximum of 0,2 bar.”

by:

“Minor adjustments to obtain the required output can be made by increasing or decreasing the pressure at each nozzle by a maximum of 20 kPa.”

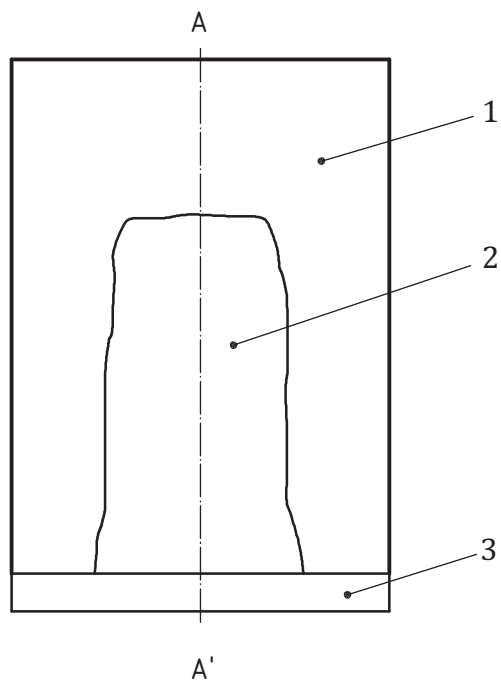
*Subclause 8.2, Alignment of spray nozzles*

Replace by:

The spray emission from nozzles shall be directed horizontally and perpendicular to the target sheet at a distance of  $(1,5 \pm 0,1)$  m and produce a spray pattern that is symmetrical along a vertical line through the centre point of the turntable.

The correct alignment of the nozzles can be checked with a target sheet to confirm the spray pattern. This target sheet is water-absorbing with  $1 \text{ m} \times 2,1 \text{ m}$  or more and is placed vertically at  $90^\circ$  to the nozzle outlet and at the centre point of the turntable. The spray should form a pattern of liquid on the target sheet, distributed symmetrically along a vertical line through the centre point of the turntable. (See [Figure 2](#).)

The difference between the centre line of the target sheet and the centre line of the spray pattern should be a maximum of 10 cm. If this is not the case, adjustment should be made.



**Key**

- 1 water-absorbing sheet
- 2 spray pattern on the target fabric
- 3 turntable
- AA' axis line through the centre of the turntable

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**Figure 2 — Checking the alignment of the nozzles (schematic representation)**

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