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Standard**

ISO 20345

**Personal protective equipment —
Safety footwear**

AMENDMENT 1

Équipement de protection individuelle — Chaussures de sécurité

AMENDEMENT 1

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This document was prepared by Technical Committee ISO/TC 94, *Personal safety — Personal protective equipment*, Subcommittee SC 3, *Foot protection*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 161, *Foot and leg protectors*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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Personal protective equipment — Safety footwear

AMENDMENT 1

Clause 2 Normative references

Update the reference to “ISO 20344:2021” with “ISO 20344:2021+Amd.1:2024” and update the references throughout the document accordingly.

Clause 2 Normative references

Change the title of EN 13832-3:2018 to read as follows:

“Footwear protecting against chemicals — Part 3: Requirements for prolonged contact with chemicals”

5.1, Table 2

In the section “Upper”, add an “X” in the last two cells of the row “Tear strength” to read as follows:

Tear strength	5.4.3	X		X	X
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In the section “Upper”, add an “X” in the last two cells of the row “Water vapour permeability and coefficient”, to read as follows:

Water vapour permeability and coefficient	5.4.6	X		X	X
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5.3.2.5

Replace the subclause with the following:

“When non-metallic toecaps are tested according to ISO 20344:2021+Amd.1:2024, 5.6.2 at an impact energy of (200 ± 4) J, the clearance under the toecap, at the moment of impact, shall not be less than the appropriate value given in ISO 22568-2:2019, Table 3. In addition, the non-metallic toecap shall not develop sharp edges or any cracks passing through the material (i.e. through which light can be seen). During the assessment of the non-metallic toecap designed with perforations the criteria whether light can be seen shall not be applied to the perforation.”

5.3.2.6, 2nd sentence

Delete the words “*delamination or*” to read as follows:

“In addition, the toecap shall not develop any cracks, which go through the material, i.e. through which light can be seen.”

5.3.2.7, 2nd sentence

Delete the words “*delamination or*” to read as follows:

“In addition, the toecap shall not develop any cracks, which go through the material, i.e. through which light can be seen.”

5.3.3

Replace the subclause with the following:

“When tested in accordance with ISO 20344:2021+Amd.1:2024, 5.7 there shall be no leakage of air. For design A of class II footwear, this requirement is not applicable.”

5.3.6, 3rd paragraph

Replace the paragraph with the following:

“For each leather part tested in accordance with ISO 20344:2021+Amd.1:2024, 6.11, the chromium VI content shall be less than 3,0 mg/kg.”

5.4.1.1, 2nd sentence

Add the wording “, *except for water vapour permeability and water vapour coefficient (see 5.4.6).*” to the end of the sentence, to read as follows:

“Any materials in the upper below the height defined in Table 8 shall meet the requirements of the upper (see Table 2), *except for water vapour permeability (WVP) and water vapour coefficient (WVC) (see 5.4.6).*”

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Replace the text above Figure 6 with the following:

“Hybrid footwear (3.19) consists of two classes of materials: foot section, Area A, class II material and extended section, area B, class I material.

The Area A, shall be measured as H, between the lowest point of the top of the visible polymer (or rubber) part and the ground (see Figure 6) and shall have a minimum height corresponding to the values given in Table 8 for design B. All material extensions above belong to area B.

All materials shall meet the requirements of the upper depending on the class of material (see Table 2).”

5.4.6

Replace the subclause with the following:

“Footwear shall comply with one of the following criteria’s:

- a) If the upper contains an area of maximum 10 % of non-water vapour permeable material, measured according to ISO 20344:2021+Amd.1:2024, 6.2.3, all remaining materials shall fulfil a water vapour permeability of at least 0,8 mg/(cm²·h) and the water vapour coefficient shall be at least 15 mg/cm² when tested in accordance with ISO 20344:2021+Amd.1:2024, 6.6, 6.7 and 6.8