

BUREAU OF INDIAN STANDARDS

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भारतीय मानक मसौदा

**जूते — जूते और जूते के घटकों में मौजूद संभावित
हानिकारक पदार्थ — जूते सामग्री में मात्रात्मक
पॉलीसाइक्लिक एरोमैटिक हाइड्रोकार्बन (पीएचएस)
निर्धारित करने के लिए परीक्षण पद्धति**

Draft Indian Standard

**Footwear — Critical Substances Potentially
Present in Footwear and Footwear Components —
Test Method to Quantitatively Determine
Polycyclic Aromatic Hydrocarbons (PAHs)
in Footwear Materials**

(ICS 61.060)

Footwear Sectional Committee, CHD 19

Last Date for Comments: **17 September 2025**

NATIONAL FOREWORD

(Formal clause will be added later)

Polycyclic Aromatic Hydrocarbons (PAHs) are not specifically added during footwear manufacturing but may be present as unintentional contaminants in certain raw materials, particularly in rubber and plastic components. These substances can originate from the use of carbon black, extender oils, or recycled materials during the production of various footwear and polymer-based components. Some PAHs are classified as carcinogenic and pose health risks upon dermal exposure. Due to their potential impact on consumer safety, regulatory limits have been established for PAH content to ensure safety.

This Standard specifies a method to determine the amounts of polycyclic aromatic hydrocarbons (PAHs) in footwear and footwear components.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions and terminologies are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker in the International Standard, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their places, are listed below along with their degree of equivalence for the editions indicated:

| International Standard | Corresponding Indian Standard | Degree of Equivalence |
|--|---|-------------------------------|
| ISO 4787 Laboratory glassware — Volumetric instruments — Methods for testing of capacity and for use | IS 18235 : 2023/ISO 4787:2021 Laboratory glass and plastic ware — Volumetric instruments — Methods for testing of capacity and for use (first revision) | Identical with ISO 4787: 2021 |

In this adopted standard, reference appears to certain International Standards where the standard atmospheric conditions to be observed are stipulated which are not applicable to tropical/subtropical countries. The applicable standard atmospheric conditions for Indian conditions are $27^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and (65 ± 5) percent, relative humidity and shall be observed while using this standard.

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2: 2022 'Rules for rounding off numerical values (*second revision*)'.

FOR COMPLETE TEXT OF THE DOCUMENT, KINDLY REFER ISO 16190 : 2021

Note: The technical content of the document has not been enclosed as these are identical with the corresponding ISO Standard. For obtaining the copy of the complete ISO Standard, please contact:

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