

DRAFT FOR COMMENTS ONLY

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भारतीय मानक मसौदा
भीतरी वायु
भाग 3 भीतरी वायु और परीक्षण कक्ष वायु में फॉर्मेलिडहाइड और अन्य कार्बोनिल
यौगिकों का निर्धारण — सक्रिय नमूनाकरण विधि
[IS 17118 (Part 3) का पहला पुनरीक्षण]

Draft Indian Standard
Indoor Air
Part 3 Determination of Formaldehyde and Other Carbonyl Compounds
in Indoor and Test Chamber Air — Active Sampling Method
[First Revision of IS 17118 (Part 3)]

ICS 13.040.20

Air Quality Sectional Committee, CHD 35

Last Date for Comments: 6th December 2025

Air Quality Sectional Committee, CHD 35

NATIONAL FOREWORD

(Formal clause will be added later)

This standard was first published in 2022 by adopting ISO 16000-3 : 2011 under a dual numbering system. During the review of IS 17118 Part 3, the committee noted that ISO 16000-3 : 2011 had been revised as ISO 16000-3 : 2022 and considered it suitable for adoption. Accordingly, this revision has been taken to align the standard with the latest version, ISO 16000-3 : 2022.

The following changes in the revision are as follows:

- a) clarification of the suitability of the method for acrolein measurements.

This part of ISO specifies a determination of formaldehyde (HCHO) and other carbonyl compounds (aldehydes and ketones) in air. The method is specific to formaldehyde but, with modification, at least 12 other aromatic as well as saturated and unsaturated aliphatic carbonyl compounds can be detected and quantified. It is suitable for determination of formaldehyde and other carbonyl compounds in the approximate concentration range 1 µg/m³ to 1 mg/m³.

This Indian Standard is published in several parts. The other parts in this series are:

Part 1 General aspects of sampling strategy

Part 2 Sampling strategy for formaldehyde

Part 4 Determination of Formaldehyde — Diffusive Sampling Method

Part 5 Sampling Strategy for Volatile Organic Compounds (VOCs) (*Under preparation*) Doc No. 28183

Part 6 Determination of volatile organic compounds in indoor air and test chamber air by active sampling on Tenax TA® sorbent, thermal desorption and gas chromatography using MS/FID (*Under preparation*) Doc No. 28184

Part 7 Sampling strategy for determination of airborne asbestos fibre concentrations (*Under preparation*) Doc No. 28185

Part 9 Determination of the emission of volatile organic compounds from samples of building products and furnishing emission test chamber method (*Under preparation*) Doc No. 28186

Part 10 Determination of the emission of volatile organic compounds from building products and furnishing Emission test cell method (*Under preparation*) Doc No. 28187

Part 11 Determination of the emission of volatile organic compounds from samples of building products and furnishing — sampling, storage of samples and preparation of test specimens (*Under preparation*)

Part 15 Sampling Strategy for Nitrogen Dioxide (NO₂) (*Under preparation*)

Part 37 Measurement of PM 2.5 mass concentration

Part 40 Indoor air quality management system

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.

The technical committee has reviewed the provisions of the following International Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with this standard.

<i>International Standard No</i>	<i>Title</i>
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories

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 °C ± 2°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 16000 -3 : 2022

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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