

वायु प्रदूषण — मापने की विधियाँ

भाग 27 वाष्प-चरण कार्बनिक रसायन विनाइल क्लोराइड से nC_{22} वायु और गैसीय उत्सर्जन में हाइड्रोकार्बन सॉर्बेंट ट्यूब या कार्ट्रिज पर डिफ्यूसिव (निष्क्रिय) सैंपलिंग के बाद थर्मल डिऑर्शन (टीडी) और केशिका गैस क्रोमैटोग्राफी (जीसी) विश्लेषण

डिऑर्शन
केशिका

Air Pollution — Methods for
Measurement

Part 27 Vapour-Phase Organic Chemicals Vinyl Chloride to nC_{22} Hydrocarbons in air and Gaseous Emissions by Diffusive (Passive) Sampling onto Sorbent Tubes or Cartridges Followed by Thermal Desorption (TD) and Capillary gas Chromatography (GC) Analysis.

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FOREWORD

This Indian Standard (Part 27) was adopted by the Bureau of Indian Standards after the draft finalized by the Air Quality Sectional Committee had been approved by the Chemical Division Council.

This Indian Standard addresses a wide range of air monitoring applications and is prepared in two parts. IS 5182 (Part 27) covers diffusive (passive) sampling of vapour phase organic chemicals onto sorbent tubes or cartridges followed by analysis using thermal desorption-gas chromatography (TD-GC). Compatible matrices include ambient air, indoor/in-vehicle air and workplace air. Target compounds include the important pollutants benzene, toluene and xylene, together with industrial solvents, fuel components, odorous compounds and many other volatile and semi-volatile organic compounds. IS 5182 (Part 28) covers pumped sampling of vapour phase organic chemicals onto sorbent tubes followed by analysis using TD-GC and addresses a similar wide range of air monitoring applications plus product emission testing.

Useful additional information is provided in various international standards, referenced in each respective sub-part, but these standard harnesses the measuring techniques available and used in India.

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

Part 1 Dust fall

Part 2 Sulphur dioxide

Sec 1 Tetrachloromercurate/Pararosaniline method

Sec 2 Ultraviolet fluorescence method

Part 3 Radioactivity (particulate in air)

Part 4 Suspended particulate matter

Part 5 Sampling of gaseous pollutants

Part 6 Oxides of nitrogen

Sec 2 Chemiluminescence method

Part 7 Hydrogen sulphide

Part 8 Sulphation rate

Part 9 Oxidants

Part 10 Carbon monoxide

Part 11 Benzene, toluene and xylene (BTX)

Part 12 Polynuclear aromatic hydrocarbons (PAHs) in air particulate matter

Part 13 Total fluorides in ambient air

Part 14 Guidelines for planning the sampling of atmosphere

Part 15 Mass concentration of particulate matter in the atmosphere

Sec 2 Beta-ray absorption method

Part 16 Recommended practice for collection by filtration and determination of mass, number and optical sizing of atmospheric particulates

Part 17 C1 to C5 hydrocarbons in air by gas chromatography

Part 18 Continuous analysis and automatic recording of the oxidant content of the atmosphere