

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

(Not to be reproduced without permission of BIS or
used as an Indian Standard)

भारतीय मानक मसौदा

प्लास्टिक — परीक्षण पद्धति

भाग 5 यांत्रिक गुणधर्म

अनुभाग XX गत्यात्मक यांत्रिक गुणधर्म का निर्धारण

उपभाग 1 सामान्य सिद्धांत

Draft Indian Standard

PLASTICS — METHODS OF TESTING
PART 5 MECHANICAL PROPERTIES
SEC XX DETERMINATION OF DYNAMIC MECHANICAL PROPERTIES
SUBSEC 1 GENERAL PRINCIPLES

(ICS 83.080.01)

Methods of Sampling and Test for Plastics
Sectional Committee, PCD 27

Last date for receipt of comment is
27 July 2024

NATIONAL FOREWORD

(Formal clauses will be added later)

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

- Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- Comma (,) has been used as a decimal marker 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 Standard for which Indian Standard also exist. The corresponding Indian Standard, which is to be substituted in their respective places, is listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
-------------------------------	--------------------------------------	------------------------------

ISO 291, Plastics — Standard atmospheres for conditioning and testing	IS 196 : 1966 — Atmospheric conditions for testing (Revised)	Not Equivalent
ISO 6721-2 Plastics — Determination of dynamic mechanical properties — Part 2: Torsion-pendulum method	PCD/27/25746 Plastics — Methods of testing : Part 5 Mechanical properties, Sec XX Determination of dynamic mechanical properties Subsec 2 Torsion-pendulum method (<i>Under WC</i>) [IS 13360 (Part 5/Sec XX/Subsec 2)]	Identical
ISO 6721-3 Plastics — Determination of dynamic mechanical properties — Part 3: Flexural vibration — Resonance-curve method	PCD/27/25747 Plastics — Methods of testing : Part 5 Mechanical properties, Sec XX Determination of dynamic mechanical properties Subsec 3 Flexural vibration — Resonance-curve method (<i>Under WC</i>) [IS 13360 (Part 5/Sec XX/Subsec 3)]	Identical
ISO 6721-4 Plastics — Determination of dynamic mechanical properties — Part 4: Tensile vibration — Non-resonance method	PCD/27/25748 Plastics — Methods of testing : Part 5 Mechanical properties, Sec XX Determination of dynamic mechanical properties Subsec 4 Tensile vibration — Non-resonance method (<i>Under WC</i>) [IS 13360 (Part 5/Sec XX/Subsec 4)]	Identical
ISO 6721-5 Plastics — Determination of dynamic mechanical properties — Part 5: Flexural vibration — Non-resonance method	PCD/27/25749 Plastics — Methods of testing : Part 5 Mechanical properties, Sec XX Determination of dynamic mechanical properties Subsec 5 Flexural vibration — Non-resonance method (<i>Under WC</i>) [IS 13360 (Part 5/Sec XX/Subsec 5)]	Identical
ISO 6721-6 Plastics — Determination of dynamic mechanical properties — Part 6: Shear vibration — Non-resonance method	PCD/27/25750 Plastics — Methods of testing : Part 5 Mechanical properties, Sec XX Determination of dynamic mechanical properties Subsec 6 Shear vibration — Non-resonance method (<i>Under WC</i>) [IS 13360 (Part 5/Sec XX/Subsec 6)]	Identical
ISO 6721-7 Plastics — Determination of dynamic mechanical properties — Part 7: Torsional vibration — Non-resonance method	PCD/27/25751 Plastics — Methods of testing : Part 5 Mechanical properties, Sec XX Determination of dynamic mechanical properties Subsec 7 Torsional vibration — Non-resonance method (<i>Under WC</i>) [IS 13360 (Part 5/Sec XX/Subsec 7)]	Identical
ISO 6721-8 Plastics — Determination of dynamic mechanical properties —	PCD/27/25752 Plastics — Methods of testing : Part 5 Mechanical properties, Sec XX Determination of dynamic mechanical	Identical

Part 8: Longitudinal and shear vibration — Wave-propagation method	properties Subsec 8 Longitudinal and shear vibration — Wave-propagation method (<i>Under WC</i>) [IS 13360 (Part 5/Sec XX/Subsec 8)]	
ISO 6721-9 Plastics — Determination of dynamic mechanical properties — Part 9: Tensile vibration — Sonic-pulse propagation method	PCD/27/25753 Plastics — Methods of testing : Part 5 Mechanical properties, Sec XX Determination of dynamic mechanical properties Subsec 9 Tensile vibration — Sonic-pulse propagation method (<i>Under WC</i>) [IS 13360 (Part 5/Sec XX/Subsec 9)]	Identical
ISO 6721-10 Plastics — Determination of dynamic mechanical properties — Part 10: Complex shear viscosity using a parallel-plate oscillatory rheometer	PCD/27/25754 Plastics — Methods of testing : Part 5 Mechanical properties, Sec XX Determination of dynamic mechanical properties Subsec 10 Complex shear viscosity using a parallel-plate oscillatory rheometer (<i>Under WC</i>) [IS 13360 (Part 5/Sec XX/Subsec 10)]	Identical
ISO 6721-12 Plastics — Determination of dynamic mechanical properties — Part 12: Compressive vibration — Non-resonance method	PCD/27/25756 Plastics — Methods of testing : Part 5 Mechanical properties, Sec XX Determination of dynamic mechanical properties Subsec 12 Compressive vibration — Non-resonance method (<i>Under WC</i>) [IS 13360 (Part 5/Sec XX/Subsec 12)]	Identical

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

<i>International Standard</i>	<i>Title</i>
ISO 4593	Plastics — Film and sheeting — Determination of thickness by mechanical scanning

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*)’.

NOTE — The technical content of this document has not been enclosed as this is identical with the corresponding ISO Standard. For details, please refer to ISO 6721-1: 2019 or kindly contact:

Smt. Meenal Passi
Sc – F & Head (PCD)
 Petroleum & Coal related products Department (PCD)
 Bureau of Indian Standards

Doc.: PCD 27 (25745) WC
ISO 6721-1:2019
IS 13360 (Part 5/Sec XX/Subsec 1) : 202Y
May 2024

9, B.S. Zafar Marg,
New Delhi-110002
Email: pcd@bis.gov.in
Telephone: 011-23235432