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Draft Indian Standard

**PLASTICS — METHODS OF TESTING
PART 6 THERMAL PROPERTIES
SECTION 1 DETERMINATION OF VICAT SOFTENING TEMPERATURE OF
THERMOPLASTIC MATERIALS
(Third Revision of IS 13360 (Part 6/Sec 1))**

(ICS No. 83.080.20)

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

Last date for receipt of
comment is **28 January 2024**

NATIONAL FOREWORD
(Formal clauses to be added later)

This Indian Standard was originally published in 1992 and subsequently revised in 1999 and 2018. This revision has been undertaken to align with the latest version of ISO 306 : 2022.

The major changes in this revision are as follows:

- The document has been updated to allow for the use of commercial universal equipment (i.e. covering both ISO 75 and ISO 306) and modern testing practices.

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:

- 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 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 respective places, are 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	Not equivalent
ISO 293 Plastics — Compression moulding of test specimens of thermoplastic materials	PCD 27 (24270) WC Plastics — Methods of Testing : Part 2 Sampling and Preparation of Test Specimens, Section 1 Plastics — Compression moulding of test specimens of thermoplastic materials (<i>revision of IS 13360 (Part 2/Sec 1)</i>)	Identical
ISO 294-1 Plastics — Injection moulding of test specimens of thermoplastic materials — Part 1: General principles, and moulding	IS 13360 (Part 2/Sec 3) : 2019/ISO 294-1 : 2017 Plastics — Methods of Testing : Part 2 Sampling and Preparation of Test Specimens, Section 3 Injection moulding of test specimens of	Identical

of multipurpose and bar test specimens	thermoplastic materials — General principles and moulding of multipurpose and bar test specimens (<i>first revision</i>)	
ISO 294-2 Plastics — Injection moulding of test specimens of thermoplastic materials — Part 2: Small tensile bars	IS 13360 (Part 2/Sec 9) : 2021 ISO 294-2: 2018 Plastics — Methods of Testing : Part 2 Sampling and Preparation of Test Specimens, Section 9 Injection moulding of test specimens of thermoplastic materials — Small tensile bars (First Revision)	Identical
ISO 294-3 Plastics — Injection moulding of test specimens of thermoplastic materials — Part 3: Small plates	IS 13360 (Part 2/Sec 7) : 2021/ ISO 294-3 Plastics — Methods of Testing : Part 2 Sampling and Preparation of Test Specimens, Section 7 Injection moulding of test specimens of thermoplastic materials — Small plates (<i>third revision</i>)	Identical
ISO 472 Plastics — Vocabulary	IS 2828 : 2019/ISO 472 : 2013 Plastics — Vocabulary (<i>second revision</i>)	Identical
ISO 2818 Plastics — Preparation of test specimens by machining	IS 13360 (Part 2/Sec 4) : 2021 ISO 2818: 2018 Plastics - Methods of testing: Part 2 Sampling and preparation of test specimens, Section 4 Preparation of test specimens by machining (<i>Second Revision</i>)	Identical
IEC 60584-1 Thermocouples — Part 1: EMF specifications and tolerances	IS 16923 (Part 1) : 2018/IEC 60584-1 : 2013 Thermocouples : Part 1 EMF Specifications and Tolerances (<i>first revision</i>)	Identical
IEC 60584-3 Thermocouples — Part 3: Extension and compensating cables — Tolerances and identification system	IS 16923 (Part 3) : 2023/IEC 60584-3 : 2021 Thermocouples : Part 3 Extension and Compensating Cables — Tolerances and Identification System	Identical
IEC 60751 Industrial platinum resistance thermometers and platinum temperature sensors	IS 2848 : 2023/IEC 60751 : 2022 Industrial Platinum Resistance Thermometers and Platinum Temperature Sensors (<i>second revision</i>)	Identical

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</i>	<i>Title</i>
ISO 16012	Plastics — Determination of linear dimensions of test specimens
ISO 20753	Plastics — Test specimens

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 306 : 2022 or kindly contact:

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