

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY
(*Not to be reproduced without permission of BIS
or used as an Indian Standard*)

Draft Indian Standard

**RUBBER, RAW NATURAL — GUIDELINES AND REQUIREMENTS FOR
TECHNICALLY SPECIFIED LOW-PROTEIN NATURAL RUBBER**

(ICS 83.040.10)

Rubber and Rubber Products Sectional Committee,
PCD 13

Last date for comment
12 April 2024

NATIONAL FOREWORD

(Formal clauses will be added later)

This standard is an identical adoption of ISO 24376:2022 ‘Rubber, raw natural — Guidelines and requirements for technically specified low-protein natural rubber’ under dual numbering 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 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 249 Rubber, raw natural — Determination of dirt content | IS 3660(Part 1) : 1999 Methods of test for natural Rubber Part 1 Determination of dirt [NR : 1] (<i>third revision</i>) | Non Equivalent |
| ISO 289-1 Rubber, unvulcanized — Determinations using a shearing-disc viscometer — Part 1: Determination of Mooney viscosity | IS 3660 (Part 7) : 2013 / ISO 289-1 : 2005 Methods of test for natural rubber Part 7 Determination of mooney viscosity[NR : 8] (<i>third revision</i>) | Identical |
| ISO 1656 Rubber, raw natural, and rubber latex, natural — Determination of nitrogen content | IS 3708 (Part 8) : 2018 / ISO 1656 : 2014 Methods of test for natural rubber latex Part 8 Rubber, raw natural and rubber latex, natural — Determination of nitrogen content (<i>third revision</i>) | Identical |
| ISO 1795 Rubber, raw natural and raw synthetic — Sampling and further preparative procedures | IS 5599 : 1999 Rubber — raw, natural and synthetic methods for sampling and sample preparation (<i>first revision</i>) | Non Equivalent |
| ISO 2930 Rubber, raw natural — Determination of plasticity retention index (PRI) | IS 3660 (Part 12) : 2022 / ISO 2930 : 2017 Methods of test for natural rubber Part 12 Determination of plasticity retention index (PRI) [NR : 13] (<i>third revision</i>) | Identical |
| ISO 2007 Rubber, raw — Determination of volatile-matter content — Part 1: Hot-mill method and oven method | IS 3660 (Part 11) : 2017/ISO 2007 : 2007 Methods of Test for Natural Rubber Part 11 Determination of Plasticity — Rapid-Plastimeter Method [NR : 12] (Second Revision) | Identical |

The technical committee has reviewed the provisions of the following International Standard 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 247-1 | Rubber — Determination of ash — Part 1: Combustion method |
| ISO 248-1 | Rubber, raw — Determination of volatile-matter content — Part 1: Hot-mill method and oven method |

| | |
|------------|---|
| ASTM D5712 | Standard test method for analysis of aqueous extractable protein in latex, natural rubber, and elastomeric products using the modified Lowry Method |
| ASTM D6499 | Standard test method for immunological measurement of antigenic protein in Hevea Natural Rubber (HNR) and its products |

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

NOTE — The technical content of the document is not available on website. For details, please refer the corresponding ISO 24376:2022 or kindly contact:

Ms. Meenal Passi
Scientist 'F' & Head (PCD)
Petroleum & Coal related products Department (PCD)
Bureau of Indian Standards 9, B.S. Zafar Marg, New Delhi-110002
Email: pcd@bis.gov.in, pcd13@bis.gov.in
Telephone: 011-23235432