



Designation: D1485 – 07 (Reapproved 2020)

Standard Practice for Rubber from Natural Sources—Sampling and Sample Preparation¹

This standard is issued under the fixed designation D1485; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice, intended for referee purposes, covers a uniform procedure for sampling lots of solid natural rubber. Natural rubber generally is marketed in bales or packages of various sizes.

1.2 A procedure for determining the acceptability of lots of natural rubber is given. This procedure is based on a variable sampling plan.

1.3 The sample size is based on the assumption of a visually homogeneous material. If obvious heterogeneity exists, the number of samples shall be increased.

1.4 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

[D1278 Test Methods for Rubber from Natural Sources—Chemical Analysis](#)

[D3182 Practice for Rubber—Materials, Equipment, and Pro-](#)

[cedures for Mixing Standard Compounds and Preparing Standard Vulcanized Sheets](#)

[D3184 Practice for Rubber—Evaluation of NR \(Natural Rubber\)](#)

2.2 *ANSI Standard:*

[Z1.9 Sampling Procedures and Tables for Inspection by Variables for Percent Defective](#)³

3. Significance and Use

3.1 This practice outlines a procedure for sampling and sample preparation of natural rubber. A statistical method for determining a quality index and lot acceptability is given. The sampling plan is optional for quality control or production, but may be used when needed for referee purposes.

4. Sampling

4.1 *Sample Size*—The number of samples to be selected to represent the lot shall be determined by the size of the lot as indicated in [Table 1](#). A sample bale is selected randomly from the lot for each sample required.

NOTE 1—The sampling plan is more efficient for large lots. The risk for the producer and consumer decreases as the sample size increases.

4.2 *Removal of Test Portion:*

4.2.1 From each sample bale selected, cut one 600 to 1500-g test portion of rubber, depending on the tests to be made. Each test portion is tested separately. Cut the test portion through the entire bale, normal to the bale surfaces of the largest area, without the use of lubricant. Remove outer wrapping sheets, polyethylene film, bale coating, or other extraneous surface material from the test portion. Unless the test portion is to be tested immediately, place it in an airtight container of not more than twice the volume of the test portion, or wrap it tightly in two layers of aluminum foil until tested.

NOTE 2—In testing for volatile matter only, a sample weighing approximately 150 g may be taken as a continuous piece from any part of the bale.

5. Lot Acceptability

5.1 Each property of the lot is evaluated separately. The requirements of these tests are of two types: (1) those having a

¹ This practice is under the jurisdiction of ASTM Committee D11 on Rubber and Rubber-like Materials and is the direct responsibility of Subcommittee D11.22 on Natural Rubber.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American National Standards Institute, 25 W. 43rd St., 4th Floor, New York, NY 10036.