



Standard Practice for Sampling Vegetable Materials Containing Tannin¹

This standard is issued under the fixed designation D 6404; 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 covers obtaining representative samples from shipment lots of botanical materials containing tannin.

1.2 The values stated in SI units are to be regarded as the standard. The inch-pound units given in parentheses are for information only.

1.3 *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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*²

D 1517 Definitions of Terms Relating to Leather

2.2 *ALCA Method:*

J10 Sampling Vegetable Materials Containing Tannin³

3. Terminology

3.1 *Definitions:*

3.1.1 For definitions of general leather and tanning terms used in this practice refer to Definitions D 1517.

3.1.2 *quartering*—the term applied to a method described in this practice of reducing the size of samples without impairing their representative quality.

3.1.3 *tannin*—an astringent substance found in the various parts of plants such as bark, wood, leaves, nuts, fruits, roots, etc.

3.1.4 *vegetable tannins*—mixtures of substances (natural products) obtained from plant tissues by water extraction

which have the chemical and physical properties necessary to convert animal hides and skins into leather.

4. Summary of Practice

4.1 This practice describes methods for obtaining representative samples for analysis from shipments of vegetable tanning materials and tannin extracts.

5. Significance and Use

5.1 This practice provides standard procedures for obtaining representative samples of various materials used as a source of tannins for the tanning industry.

5.2 Procedures are described for obtaining representative samples of economical and convenient quantities from a lot, or sections of a lot, of material for examination and analysis so that agreement may be reached with regard to the extent of variation of quality in different portions of a lot and the average quality of the entire lot of material.

5.3 No directions for sampling, however explicit, can take the place of judgment, skill, and previous experience on the part of persons actually engaged in the sampling or the supervision of the sampling. These directions are intended to supplement that experience and, particularly, to serve as a guide in the selection of the method which is to be used, in common, by each of two or more contracting parties.

5.4 Tanning materials contain moisture in varying amounts, depending both on the nature of the material and on the climatic conditions, so that sampling must be carried out as quickly as is consistent with thoroughness in order to avoid changes in moisture content.

6. Apparatus

6.1 *Balance*, analytical balance which will weigh the quantity of material specified in this practice to an accuracy of ± 10 g (± 0.35 oz).

6.2 *Canvas*, 11-oz weight and of sufficient size (as determined by the discretion of the sampler or analyst) for use in mixing and quartering samples.

6.3 *Sieve*, with round openings 1.27 cm (0.50 in.) in diameter.

6.4 *Sampling Tool*, this tool shall be made of brass or other corrosion-resistant metal tubing, with solid handle attached, similar to that described below and illustrated in Fig. 1.

¹ This practice is under the jurisdiction of ASTM Committee D31 on Leather and is the direct responsibility of Subcommittee D31.01 on Vegetable Leather. This test method has been adapted from and is a replacement for Method J10 of the Official Methods of the American Leather Chemists Association.

Current edition approved April 1, 2004. Published May 2004. Originally approved in 1999. Last previous edition approved in 1999 as D 6404 – 99.

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 Official Methods of the American Leather Chemists Association. Available from the American Leather Chemists Association, University of Cincinnati, P.O. Box 210014, Cincinnati, OH 45221-0014.