Designation: ~~D5556 – 95 (Reapproved 2011)~~ D5556 – 19

Standard Test Method for Determination of the Moisture and Other Volatile Matter Contained in Fats and Oils Used in ~~Fat Liquors~~ Fatliquors and Softening Compounds[1]

This standard is issued under the fixed designation D5556; 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 test method covers the determination of moisture and other volatile material under conditions of the test. It is applicable to all ~~fats and oils, including emulsions.~~fats, oils, and fatliquors used in the softening and stuffing of leather.

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

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~~ safety, health, and ~~health~~environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *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:*

E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods

E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method

3. Significance and Use

3.1 This test method is intended for use in the determination of the moisture and other volatile matter contained in ~~fats~~ fats, oils, and ~~oils~~fatliquors used in the softening and stuffing of leather, as well as those used in the manufacture of products for such purpose.

4. Apparatus

4.1 *Electric Hot Plate,* with ~~ceramic top and~~ uniform heat transfer across the surface, chemical and scratch resistant.

4.2 *Glass Beakers,* 100 to 150 ~~mL,~~mL.

4.3 *Desiccator,* containing an efficient desiccant.

5. Procedure

5.1 Accurately weigh 5 to ~~20~~10 g of a ~~well mixed~~ well-mixed sample into a tared beaker that has been previously dried and cooled in a desiccator. Then heat the sample on the hot plate, slowly increasing to medium temperature-settings, rotating the beaker gently, by hand, to avoid spattering that may result from too rapid ebullition of moisture. If an excess of spattering occurs, the experiments should be stopped and another technique should be used.

5.2 Judge the approach of the end-point by the cessation of the rising bubbles of steam as well as by the absence of foam. Another good method of judging the end-point is to place a clean, dry watch glass on top of the beaker. The evolution of steam is indicated by condensation on the watch glass. The temperature of the sample shall at no time be allowed to exceed 130°C, except at the end of test.

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[1] This test method is under the jurisdiction of ASTM Committee D31 on Leather and is the direct responsibility of Subcommittee D31.08 on Fats and Oils. This test method was developed in cooperation with the American Leather Chemists Assn. (Method H 20–1957).

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