~~Designation:D1133–04~~ Designation: D 1133 – 09

Standard Test Method for Kauri-Butanol Value of Hydrocarbon Solvents[1]

This standard is issued under the fixed designation D 1133; 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.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope*

1.1 This test method covers the determination of the relative solvent power of hydrocarbon solvents used in paint and lacquer formulations. This test method is suitable for use with solvents having an initial boiling point over 40°C and a dry point under 300°C when determined in accordance with the procedures in Note 1.

NOTE 1—Test Method D 86 is used to determine the initial boiling point and dry point for mineral spirits and similar petroleum solvents. Test Method D 1078 is used for pure compounds and narrow boiling range cuts.

1.2 The values stated in SI units are to be regarded as ~~the~~ standard. ~~The values given in parentheses~~No other units of measurement are ~~for information only.~~

~~1.3The following applies to all specified limits~~ included in this ~~standard; for~~standard.

1.3 For purposes of determining conformance ~~with this standard,~~ of an observed ~~value~~ or a calculated value using this test method to relevant specifications, test result(s) shall be rounded off "to the nearest unit" in the last right-hand digit used in expressing the specification limit, in accordance with the rounding-off method of Practice E 29.

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1.4 For specific hazard information and guidance, consult the supplier's Material Safety Data Sheet.

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

~~1.5For specific hazard information and guidance, consult the supplier's Material Safety Data Sheet.~~

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D 86 Test Method for Distillation of Petroleum Products at Atmospheric Pressure
D 304 Specification for *n*-Butyl Alcohol (Butanol)
D 841 Specification for Nitration Grade Toluene
D 1078 Test Method for Distillation Range of Volatile Organic Liquids
E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

3. Terminology

3.1 *Definitions:*

3.1.1 ~~*kauri-butanol value*~~kauri-butanol value, *n*— *of a solvent*, the volume in millilitres at 25°C of the solvent, corrected to a defined standard, required to produce a defined degree of turbidity when added to 20 g of a standard solution of kauri resin in normal butyl alcohol.

3.1.1.1 *Discussion*—The kauri resin solution is standardized against toluene, which has an assigned value of 105, and a mixture of 75 % *n*-heptane and 25 % toluene on a volume basis, which has an assigned value of 40.

4. Significance and Use

4.1 The kauri-butanol value is used as a measure of solvent power of hydrocarbon solvents. High kauri-butanol values indicate relatively strong solvency.

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[1] This test method is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.35 on Solvents, Plasticizers, and Chemical Intermediates .

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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.

***A Summary of Changes section appears at the end of this standard.**