



Standard Test Method for Sediment in Water-Emulsion Polishes by Centrifuge¹

This standard is issued under the fixed designation D 1290; 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 sediment in water-emulsion polishes by means of a centrifuge.

1.2 *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:

D 1796 Test Method for Water and Sediment in Fuel Oils by the Centrifuge Method (Laboratory Procedure)²

3. Significance and Use

3.1 This test method determines the amount of sediment in water-emulsion polishes. Sediment is generally believed to have negative effects on water-emulsion polish properties.

4. Apparatus

4.1 *Centrifuge and Tubes*, conforming to Paragraphs 6.1 and 6.2 on Centrifuge and Centrifuge Tubes of Test Method D 1796.

5. Sample

5.1 The sample shall be thoroughly representative of the material in question, and the portion used for the test shall be thoroughly representative of the sample itself.

6. Procedure

6.1 Measure 100 mL of the water-emulsion wax into each of two centrifuge tubes and stopper the tubes. Balance the two tubes in their holders.

6.2 Place the two tubes on opposite sides of the head and whirl for 10 min at a rate, calculated from the equation in Paragraph 6.1.3 under Centrifuge of Test Method D 1796, sufficient to produce a relative centrifugal force (rcf) of between 500 and 700 at the tips of the whirling tubes (see Table 2, Rotation Speeds Applicable for Centrifuges of Various Diameters of Swing, of Test Method D 1796 for relationship between diameter of swing, rcf, and rpm).

6.3 Read the volume of sediment in each tube, estimating to the nearest 0.1 mL if necessary. Record the average of the two readings as the percentage of sediment by the centrifuge method.

7. Precision and Bias

7.1 *Precision*—Interlaboratory and intralaboratory duplicate determinations of sediment by this test method should not differ by more than 0.2 mL.

7.2 *Bias*—This test method has no bias because the results developed are defined in terms of this test method.

8. Keywords

8.1 centrifuge; polishes; sediment; water-emulsions

¹ This test method is under the jurisdiction of ASTM Committee D21 on Polishes and is the direct responsibility of Subcommittee D21.03 on Chemical and Physical Testing.

Current edition approved Dec. 10, 1995. Published March 1996. Originally published as D 1290 – 53 T. Last previous edition D 1290 – 82 (1991) ^{ϵ 1}.

² *Annual Book of ASTM Standards*, Vol 05.01.