

Designation: D 305 – 84 (Reapproved 2003)

Standard Test Method for Solvent-Extractable Material in Black Pigments¹

This standard is issued under the fixed designation D 305; 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 solvent-extractable material in black pigments such as carbon black, lampblack, and bone black.
- 1.2 The values stated in SI units are to be regarded as the standard. The values 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:

D 329 Specification for Acetone²

3. Significance and Use

3.1 This test method is used by black pigment producers and users for product acceptance.

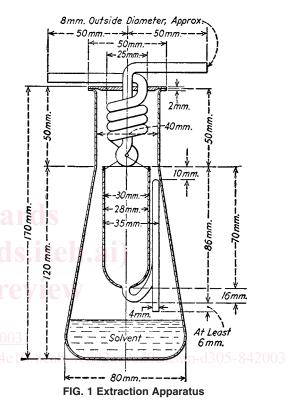
4. Apparatus

4.1 Extraction Apparatus, consisting of a flask, siphon cup, and a condenser similar to the apparatus shown in either Fig. 1 or Fig. 2.

Note 1—A Sophlet apparatus may be used as an alternative.

4.2 Extraction Thimbles—The thimble must be made of greaseless paper and be of correct size to fill the selected apparatus.

Note 2—The recommended thimble size for each of the apparatus



shown in Fig. 1 is listed below:

	Fig. 1	Fig. 2
Height	70 mm	62 mm
Inside diameter	28 mm	22 mm
Outside diameter	30 mm	24 mm

4.3 The thimbles are available in various heights and widths with two thickness levels, single thickness or double thickness. Single-thickness thimbles are recommended for this extraction procedure.

5. Reagents and Material

5.1 *Purity of Reagents*—Reagent grade chemicals shall be used in all tests. Unless otherwise indicated, it is intended that

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 D01.31 on Pigment Specifications.

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² Annual Book of ASTM Standards, Vol 06.04.