



Designation: D 6419 – 9900

Test Method for Volatile Content of ~~Non-Heatset~~ Sheet-Fed and Coldset Web Offset Printing Inks¹

This standard is issued under the fixed designation D 6419; 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 describes a procedure for determination of the weight percent volatile content of ~~non-heatset~~ sheet-fed and coldset web offset printing inks. Test specimens are heated at $110^{\circ} \pm 1^{\circ}\text{C}$ for 60 min.

~~1.2 This test method is also applicable to non-heatset web offset printing ink vehicles. It is not applicable to ultra-violet (UV) or electron beam cured materials, which must be cured by exposure to UV light or an electron beam as part of the test for volatile content.~~

~~NOTE 1—Vehicle 1—Coldset web offset printing is often (also) referred to as non-heatset web offset printing.~~

~~1.2 This test method is also applicable to sheet-fed and coldset web offset printing ink vehicles.~~

~~NOTE 2—Vehicle is the liquid portion of the printing ink. Any substance that is dissolved in the liquid portion of the ink is a part of the vehicle.~~

~~1.3 This test method is not applicable to ultra-violet (UV) or electron beam cured materials, which must be cured by exposure to UV light or an electron beam as part of the test for volatile content.~~

1.4 This test method is based on Test Method D 2369, in which the allowable ranges are $\pm 0.1\text{g}$ for specimen weight and $\pm 5^{\circ}\text{C}$ for oven temperature. Interlaboratory studies have shown that specimen weight and oven temperature must both be more tightly controlled in order to improve the precision of test results for ~~non-heatset~~ sheet-fed and coldset web-offset inks. Such inks typically contain a wide range of high-boiling hydrocarbons and often have a volatile content below 205 %.

~~1.45 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. For a specific hazard statement see Note 5. 7.5.1.~~

2. Referenced Documents

2.1 ASTM Standards:

D 2369 Test Method for Volatile Content of Coatings²

¹ This test method is under the jurisdiction of ASTM Committee ~~D-1~~ D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.56 on Printing Inks.

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