



Standard Guide for Testing Printing Ink Vehicles and Components Thereof¹

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1. Scope

1.1 This guide covers a list of test methods, practices, guides, and specifications that can be used for the testing and evaluation of printing ink vehicles and components thereof (see Table 1).

1.2 This guide includes methods that were developed to test impact and non-impact inks and vehicles associated with letterpress, lithography, flexography and gravure. Tests on raw materials and analytical tests in general have been included.

1.3 Other ASTM standards not specified here may also be applicable.

1.4 *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 requirements prior to use.*

2. Terminology

2.1 Definitions:

2.1.1 *printing ink, n*—a colored or pigmented liquid or paste

composition that is applied by printing machinery.

2.1.1.1 *Discussion*—Printing inks may contain vehicles, colorants, waxes, solvents, and other additives. Bulk inks are tested for dispersion, tinting strength, density, heat and storage stability, rheology, and printing properties.

2.1.2 *vehicle, n*—the portion of a printing ink that excludes the colorant.

2.1.2.1 *Discussion*—Ink vehicles typically include the resin/solvent portion of the printing ink. Other printing ink additives, generally not included in the vehicle, are waxes, antioxidants and driers.

3. Test Categories

3.1 For convenience in selection, the test methods, practices, guides, and specifications listed in this guide are listed numerically (see Table 1) and by property of interest (see Table 2).

4. Precision and Bias

4.1 If available, precision for each test method listed can be found in the latest revision of that test method.

5. Keywords

5.1 printing inks; printing ink vehicles; test methods and practices (tabulation of); vehicles

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