



Designation: ~~D5062~~—~~09~~ D5062 – 09 (Reapproved 2017)

Standard Test Method for Resin Solution Dilutability by Volumetric/Gravimetric Determination¹

This standard is issued under the fixed designation D5062; 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^{*}Scope

1.1 This test method covers both volumetric and gravimetric determination of resin solution dilutability which gives a numerical value for the overall solubility of the resin expressed as percent dilutability.

1.2 This test method is applicable only if the test solution is of sufficient clarity to allow accurate visual judgement of the end point and of low enough viscosity for efficient mixing to take place.

1.3 This test method is primarily for, but not limited to, resins used in the printing ink industry.

1.4 The percent solvent tolerance of a resin can be determined using this test method if the solvent in the resin solution and the dilution solvent are the same.

1.5 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.6 *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:*²

[D1725 Practice for Preparing Resin Solutions for Viscosity Measurement by Bubble Time Method](#)

[E1 Specification for ASTM Liquid-in-Glass Thermometers](#)

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *resin solution dilutability, n*—the maximum amount of diluent tolerated to reach a defined degree of turbidity; beyond this point, resin precipitation will occur.

4. Summary of Test Method

4.1 A sample of resin solution is weighed into a glass beaker that is placed over a piece of 10 point print (standard newspaper print).

4.2 The dilution solvent is added slowly from a buret until the newsprint can no longer be read (cloud point) when viewed from the top of the beaker.

4.3 The solvent dilutability is calculated by weight, or volume.

5. Significance and Use

5.1 This test method provides a means for resin producers and users as well as solvent and varnish manufacturers to rate various types of resins for solubility by assigning a numerical dilutability value. This percent dilutability value can be used to differentiate resin types for end users and can be utilized as a quality control tool by resin manufacturers.

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 D01.37 on Ink Vehicles.

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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**