



Designation: D 5286 – 9501

Standard Test Methods for Determination of Transfer Efficiency Under General Production Conditions for Spray Application of Paints¹

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1. Scope

1.1 These test methods cover the determination of the transfer efficiency of spray-applied coatings under general plant conditions. Transfer efficiency is the ratio of paint solids deposited to the total paint solids used during the application process, expressed as a percent.

1.2 The transfer efficiency is calculated from the weight or volume of the paint solids sprayed and that of the paint solids deposited on the painted part.

1.3 Limitations include the ability to accurately determine the amount of paint solids deposited on the part and the capability of accurate measurement of the amount of paint sprayed.

1.4 The values stated in ~~inch-pound~~ SI units are to be regarded as the standard. The values given in parentheses are for information only.

NOTE 1—These test methods apply to general plant production equipment and procedures. A method specific to automotive plants is defined in Test Method D 5066.

NOTE 2—The relationship between volatile organic compound emission rates and transfer efficiency in automobile and light duty truck topcoat operations, EPA 450/3-88-018, referenced in Test Method D 5066 does not apply to general production facilities.

NOTE 3—A single-point transfer efficiency measurement may not represent the entire process.

NOTE 4—The operator and the spray-application equipment-operating conditions during the transfer efficiency measurement should be representative of normal operating conditions.

1.5 *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 specific hazard statements see Section 7, and ~~Note 6: 10.3.1.~~

NOTE 5—These test methods have not been adopted by federal regulatory agencies for demonstration of compliance with air pollution regulations such as VOC, HAPS, etc.

2. Referenced Documents

2.1 ASTM Standards:

¹ These test methods are under the jurisdiction of ASTM Committee D-1 D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.55 on Factory-Applied Coatings on Preformed Products.

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