Designation: D4955 – 89 (Reapproved 2016)

Standard Practice for Field Evaluation of Automotive Polish[1]

This standard is issued under the fixed designation D4955; 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 practice covers the evaluation of the performance properties of automotive polishes. This practice is applicable to products that are commonly referred to as car/auto wax, cleaner wax, polish, and the like. This practice is limited to a comparison among test polishes, with a standard polish, or both, under the conditions of the individual test. The comparative results are indicative of absolute performance only insofar as the test conditions are representative of all normal application and use conditions.

1.2 *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. Terminology

2.1 *Definitions of Terms Specific to This Standard:*

2.1.1 *automotive polish*—substance which aids in cleaning and improving the appearance of automotive finishes.

3. Significance and Use

3.1 This practice is intended to define the range of properties to be tested, the apparatus to be used, and the comparisons of automotive polish performance to be made. Since conditions, products, and apparatus vary, considerable discretion must exist among formulators and marketers in these areas and on what properties or performance characteristics are most significant for their products. This practice is intended to be flexible enough to honor this fact within the description of automotive polish in Section 2.

3.2 The test methods are subjective and empirical in order to conform to the basic characteristics of the class of products and to allow flexibility in testing. This also conforms to typical consumer experience.

3.3 The practice also allows for flexibility in choice of environmental characteristics under which the durability testing is done. This allows discretion to be exercised by those testing the products in order to provide greatest significance for the products being tested as they are intended for various marketplace needs.

4. Apparatus and Materials

4.1 *Sample of Polish* to be tested.

4.2 *Sample of Control Polish*—A control polish should be selected for comparison to the test polish. It should be recognized that automotive polishes are formulated to perform different functions. The control polish should be selected with a clear justification in mind, such as, test and control polish should be designed for same function (high durability, ease of application, or other performance features). These factors should be taken into account when interpreting results and choosing the control polish. All results are reported with the clearly identified control comparison.

4.3 *Test Substrate*—Since this test is designed to test automotive polish performance under natural and normally occurring environmental conditions, the substrate chosen shall be one for which the test polish was intended on a vehicle which can be subjected to the chosen environmental conditions in a manner meeting these criteria. The test surface shall be in good physical condition, not badly cracked, scratched, or otherwise damaged so as to interfere with evaluation of polish properties. The test surface for each sample is intended to be one half of the surface area of the vehicle to be polished. In no case should the area polished for each product be less than 1290 cm^2 (200 $in.^2$). The surface is divided as described later in the method. (Procedures evaluating more than two polishes per vehicle may be done as a screening technique; however, results are not sufficiently reproducible to be covered by this method.)

NOTE 1—New vehicle paints (paints with service life less than one year) give properties such as, water beading and high gloss, very similar to those being evaluated for the polish. Therefore, evaluation of appearance and durability due to the polish formulation are minimized. Some paint types, such as metallic paints, may also give atypical results.

4.4 *Polishing Cloth*—The same type and size of polishing cloth shall be used with each sample tested. Separate cloths shall be used for each sample. Materials such as washed cheesecloth, rumple cloth, flannel, cotton diaper cloth, and nonwoven fabrics are suitable for this purpose. Felt or paper shall not be used.

[1] This practice is under the jurisdiction of ASTM Committee D21 on Polishes and is the direct responsibility of Subcommittee D21.04 on Performance Tests.

Current edition approved Oct. 1, 2016. Published October 2016. Originally approved in 1989. Last previous edition approved in 2008 as D4955 – 89 (2008). DOI: 10.1520/D4955-89R16.

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