



# Standard Practice for Determining the Writeability of Print Media<sup>1</sup>

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## 1. Scope

1.1 This practice covers a method for determining the writeability of print media.

1.2 Writeability is determined by writing on the face side and backside of print media with a variety of writing implements and visually assessing the writing quality and the propensity of the writing material to smear.

1.3 This practice can be used to evaluate the writeability of a variety of print media including inkjet media, electrophotographic media, silver halide media and printing paper.

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 limitations prior to use.*

## 2. Terminology

### 2.1 Definitions:

2.1.1 *smearing*—the spreading of the writing implement's writing material.

2.1.2 *writeability*—the ability of writing implements to write legibly on print media without smearing.

## 3. Significance and Use

3.1 In practical applications, customers often write information on the face side and back side of print media using various writing implements. It is desirable that that the writing implements write legibly and do not skip or smear. This test is performed using writing implements commonly used in the home and office to ensure that good writing quality is obtained.

3.2 This practice may be used to determine the writeability of a variety of print media including inkjet media, electrophotographic media, silver halide media and printing paper.

3.3 Seven different writing implements are used to determine writeability; three types of ballpoint pens, No. 2 pencil,

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washable marker, marker (regular tip), crayons. Additional writing implements may be used as appropriate.

NOTE 1—Pens should have regular point tips. Ballpoint pens from several manufacturers should be used.

3.4 Writeability is determined visually.

3.5 Test results are useful for specification acceptance between producer and user, for quality control, and for research and product development.

## 4. Interferences

4.1 A variety of print media may be used depending on the purpose of the test. Follow manufacturer/suppliers instructions to determine the face side and backside of the print media.

4.2 Interpretation of results should be made by one evaluator.

4.3 All comparative tests should be performed under the same environmental and viewing conditions.

4.4 Visual interpretations of results may vary from one individual to another.

## 5. Apparatus

5.1 *Single Sheet*, of each print media to be tested.

5.2 *Kimwipe Tissues*.

5.3 *Writing Implements*.

## 6. Test Specimen

6.1 A standard sheet of print media shall be used.

## 7. Conditioning

7.1 Condition the printer, writing implements and print media for 24 h in the same atmospheric conditions as those present where the test is to be conducted.

## 8. Procedure

8.1 Lay the print out on a flat surface.

8.2 Write the respective name of each implement with that implement, on the face side and back side of each print media being tested.

8.3 Evaluate writeability using the following scale:

- 1 = Good = Legible and no skipping
- 2 = Poor = Not legible and/or skipping
- 3 = None = Does not write on media

8.4 Using a Kimwipe, gently rub the written area with constant pressure.

8.5 Evaluate smear using the following scale:

- 1 = Pass = No smearing is evident
- 2 = Fail = Smearing is evident

## 9. Report

9.1 Report the print media tested and lot numbers.

9.2 Report the temperature and relative humidity.

9.3 Report which writing implements were used.

9.4 List a description of the types and brands of ballpoint pens, markers, or crayons used.

9.5 Report the results for each of the writing implements according to the scales in 8.3 and 8.5.

## 10. Keywords

10.1 media; writeability

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