This document is not an ASTM standard and is intended only to provide the user of an ASTM standard an indication of what changes have been made to the previous version. Because it may not be technically possible to adequately depict all changes accurately, ASTM recommends that users consult prior editions as appropriate. In all cases only the current version of the standard as published by ASTM is to be considered the official document.

Designation: B926-03 Designation: B926 - 09

# Standard Method for Pinhole Determination in Aluminum and Aluminum Alloy Plain Foil by Means of a Light Table<sup>1</sup>

This standard is issued under the fixed designation B926; 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 ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope\*

1.1 This method covers the identification and counting of pinholes, including roll holes, in plain foil using a light table, and inspector with normal 20/20 or corrected 20/20 vision, and a darkened inspection area.

1.2

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 This method may involve hazardous materials, operations, and equipment. 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:<sup>2</sup>

B373Specification for Aluminum Foil for Capacitors<sup>2</sup>

B479Specification for Annealed Aluminum and Aluminum-Alloy Foil for Flexible Barrier, Food Contact, and Other Applications<sup>2</sup>

E252Test Method for Thickness of Foil, Thin Sheet, and Film by Mass Measurement

B881 Terminology Relating to Aluminum- and Magnesium-Alloy Products

## 3. Terminology

3.1Definitions:

3.1.1

3.1 Definitions—Refer to Terminology B881 for definitions of product terms used in this specification.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *calibration*—determination of the values of the significant parameter(s) by comparison with a value(s) indicated by a reference instrument or by a set of reference standards.

3.1.2 foil—a rolled metallic product rectangular in cross-section and of a thickness less than 0.006 in. (0.15 mm). This method was developed based on aluminum foil, but could be applied to other types of metallic foil as well.

3.1.3

3.2.2 *pinhole*—any small void in the foil that will permit the transmission of light. Classification criteria for pinholes limits these voids to those that are too small in size to be clearly visible to the unaided eye ( $1 \times$  visual inspection). 3.1.4

3.2.3 roll hole—the producer's classification of a pinhole caused by an imperfection on any type of roll the foil contacts during production. The distinguishing feature of a roll hole(s) is the repeatability of this void on a regular interval. This interval is directly proportional to the circumference of the roll causing the void (this interval will also increase proportionally to subsequent thickness reductions).

#### \*A Summary of Changes section appears at the end of this standard.

Copyright © ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States

<sup>&</sup>lt;sup>1</sup> This test method is under the jurisdiction of ASTM Committee B07 on Light Metals and Alloys and is the direct responsibility of Subcommittee B07.03 on Aluminum Alloy Wrought Products.

Current edition approved April 10, 2003. Published August 2003. DOI: 10.1520/B0926-03.

Current edition approved Dec. 1, 2009. Published January 2010. Originally approved in 2003. Last previous edition approved in 2003 as B926-03. DOI: 10.1520/B0926-09.

<sup>&</sup>lt;sup>2</sup> 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 701 02.02. volume information, refer to the standard's Document Summary page on the ASTM website.