



Designation: E1792 – 20

Standard Specification for Wipe Sampling Materials for Lead in Surface Dust¹

This standard is issued under the fixed designation E1792; 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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 This specification covers requirements for wipes that are used to collect settled dusts on surfaces for the subsequent determination of lead.

1.2 For wipe materials used for the determination of beryllium in surface dust refer to Specification [D7707](#). This is mentioned to insure that users of wipes recognize that there is some relationship between the analytical backgrounds found in wipes and the analyte of interest.

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

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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

[D1356](#) Terminology Relating to Sampling and Analysis of Atmospheres

[D7707](#) Specification for Wipe Sampling Materials for Beryllium in Surface Dust

[E105](#) Practice for Probability Sampling of Materials

[E691](#) Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method

¹ This specification is under the jurisdiction of ASTM Committee [D22](#) on Air Quality and is the direct responsibility of Subcommittee [D22.12](#) on Sampling and Analysis of Lead for Exposure and Risk Assessment.

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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.

[E1605](#) Terminology Relating to Lead in Buildings

[E1613](#) Test Method for Determination of Lead by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES), Flame Atomic Absorption Spectrometry (FAAS), or Graphite Furnace Atomic Absorption Spectrometry (GFAAS) Techniques

[E1644](#) Practice for Hot Plate Digestion of Dust Wipe Samples for the Determination of Lead

[E1728](#) Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination

[E2239](#) Practice for Record Keeping and Record Preservation for Lead Hazard Activities

[E3193](#) Test Method for Measurement of Lead (Pb) in Dust by Wipe, Paint, and Soil by Flame Atomic Absorption Spectrophotometry (FAAS)

[E3203](#) Test Method for Determination of Lead in Dried Paint, Soil, and Wipe Samples by Inductively Coupled Plasma-Optical Emission Spectroscopy (ICP-OES)

[F141](#) Terminology Relating to Resilient Floor Coverings

3. Terminology

3.1 *Definitions*—For definitions of terms not listed here, see Terminologies [D1356](#) and [E1605](#).

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *lot, n*—a finite quantity of a given product manufactured under production conditions that are considered uniform.

3.2.2 *shelf life, n*—for dust-wiping sampling, the maximum time interval during which a wipe can be stored in an unopened package and remain suitable for sampling of settled dust.

3.2.3 *vinyl-composite tile, n*—a resilient floor covering composed of binder, fillers, and pigments. The binder consists of one or more resins of poly (vinyl chloride) or vinyl chloride copolymers, or both, compounded with suitable plasticizers and stabilizers. Other polymeric resins may be incorporated as part of the binder (see Terminology [F141](#)).

3.2.4 *wipe, n*—a disposable towelette that is moistened with a wetting agent.

3.2.4.1 *Discussion*—The towelette is used to collect a sample of settled dust on a surface for subsequent lead analysis.