



Standard Practice for Sampling Unconsolidated Solids in Drums or Similar Containers¹

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1. Scope

1.1 This practice covers typical equipment and methods for collecting samples of unconsolidated solids in drums or similar containers. These methods are adapted specifically for sampling drums having a volume of 110 U.S. gal (416 L) or less. These methods are applicable to hazardous material, product, or waste. Specific sample collection and handling requirements should be described in the site-specific work plan.

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 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:²

- C702** Practice for Reducing Samples of Aggregate to Testing Size
- D4547** Guide for Sampling Waste and Soils for Volatile Organic Compounds
- D4687** Guide for General Planning of Waste Sampling
- D4700** Guide for Soil Sampling from the Vadose Zone
- D6009** Guide for Sampling Waste Piles
- D6044** Guide for Representative Sampling for Management of Waste and Contaminated Media
- D6051** Guide for Composite Sampling and Field Subsampling for Environmental Waste Management Activities
- D6063** Guide for Sampling of Drums and Similar Containers by Field Personnel

¹ This practice is under the jurisdiction of ASTM Committee D34 on Waste Management and is the direct responsibility of Subcommittee D34.01.02 on Sampling Techniques.

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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.

D6311 Guide for Generation of Environmental Data Related to Waste Management Activities: Selection and Optimization of Sampling Design

D6323 Guide for Laboratory Subsampling of Media Related to Waste Management Activities

D5088 Practice for Decontamination of Field Equipment Used at Waste Sites

D5283 Practice for Generation of Environmental Data Related to Waste Management Activities: Quality Assurance and Quality Control Planning and Implementation

D5451 Practice for Sampling Using a Trier Sampler

E300 Practice for Sampling Industrial Chemicals

D5633 Practice for Sampling with a Scoop

2.2 NSC Document:

Accident Prevention Manual for Industrial Operations, 1992³

2.3 Government Documents:⁴

EPA/600/2-86/013 Drum Handling Practices at Hazardous Waste Sites, January 1986

EPA/540/4-91/001 Soil Sampling and Analysis for Volatile Compounds, February 1991

Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, National Institute for Occupational Safety and Health (NIOSH), Occupational Safety and Health Administration (OSHA), U.S. Coast Guard (USCG), and U.S. Environmental Protection Agency (EPA), October 1985

3. Terminology

3.1 Definitions:

3.1.1 *bonding*—touching the sample equipment to the drum to form an electrically conductive path to minimize potential electrical differences between the sampling equipment and the drum, reducing the buildup of static electricity.

3.1.2 *bung*—usually a 2-in. (5.1-cm) or 3/4-in. (1.3-cm) diameter threaded plug designed specifically to close a bung hole.

³ Available from National Safety Council, P.O. Box 558, Itasca, IL 60143-0558.

⁴ Available from the Superintendent of Documents, U. S. Government Printing Office, Washington, DC 20402.