



Designation: E725 – 96(Reapproved 2006)

## Standard Test Method for Sampling Granular Carriers and Granular Pesticides<sup>1</sup>

This standard is issued under the fixed designation E725; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This test method presents general procedures for sampling and sampling practice for granular carriers and granular pesticides.

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.* For specific hazard statements see Section 5.

### 2. Summary of Test Method

2.1 To produce a sample that truly represents the nature and condition of the material from which it was obtained, a gross sample is reduced by standard laboratory procedures (cone and quartering, riffing, etc.) to a suitable laboratory sample. The basic sampling unit for granules is at least 500 $\times$  the weight of the largest particles and is obtained in a manner to give high probability that it contains a representative portion of the material. As a safeguard against unforeseen sectional variations, a number of unit samples may be obtained and combined to form a gross sample.

### 3. Significance and Use

3.1 This procedure was designed principally for clay, corncob, nut shell, or sand granular carriers and granular pesticide products but need not be limited to these materials. There may be more appropriate sampling methods for other types of granular carriers and products.

### 4. Apparatus

4.1 *Sample Container*, fabricated from glass, plastic, or metal as required.

4.2 *Sample Splitter*, single-stage riffle type.

4.3 *Grain Thief or Sampling Tube* (Fig. 1), constructed from aluminum, chrome steel, poly(vinyl chloride) or other suitable material, 30 in. (762 mm) long and 1.5 to 1.75 in. (38 to 44 mm) in diameter.

### 5. Hazards

5.1 *Safety Precautions*—Before sampling granular pesticides read the precautionary statements on the product label and the material safety data sheet (MSDS). Take proper precautions to prevent skin contact and inhalation of the fines and vapors. Whenever possible, work under a hood. Take care to prevent contamination of the surrounding area. Always wear the appropriate safety equipment and, where indicated, wear respiratory devices approved by NIOSH for the product being sampled.

5.2 *Sample Precautions for Sensitive Materials*—Some products (hygroscopic, volatile, or oxidizable, etc.) may require special sampling precautions. Sample exposure should be minimized.

5.3 *Sample Containers*—These items, as well as the sampling apparatus, must be clean and free of any material that might contaminate the sample. An appropriate container should be selected for the product and handling it will receive. For example, containers for hygroscopic, readily oxidizable, volatile, or moisture-sensitive material, as well as for those materials to be tested for moisture content, must be capable of being sealed airtight.

5.4 *Care and Labeling of Sample*—Care should be taken to ensure that the sample is properly labeled and reaches the laboratory promptly and in its original state.

### 6. Procedures

6.1 *Sampling Packages*—When sampling material that is contained in a number of packages, Table 1 is a guide to the minimum number of packages (selected at random) to be sampled.

6.2 *Sampling During Production*—Collect production control samples as the product leaves the blender, or as it is packaged, taking 1/2-lb (225-g) portions at sufficient, regularly spaced intervals to obtain a total sample size representing a minimum of 0.1 % w/w of the product. Combine the samples to form a uniform gross sample. Avoid attrition if a sieve analysis is to be performed.

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee E35 on Pesticides, Antimicrobials, and Alternative Control Agents and is the direct responsibility of Subcommittee E35.22 on Pesticide Formulations and Delivery Systems.

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