

**MISCELLANEOUS MATERIALS**  
DOTD Designation: S 601-99

**I. General**

**A. Equipment**

1. Sample sacks, string, several 1 gal cans, several 1 qt cans or other suitable sample containers, suitable markers for identification.
2. Sample tube for powdered or granular solids in sacks or containers.
3. Air or mechanical stirring device to stir or blend liquids in drums or other containers.
4. Suitable cutting device for obtaining samples from reels, rolls, or selected lengths of material.
5. Other miscellaneous items such as tape or wire in order to secure samples by wrapping or tying.
6. MATT forms, envelopes and tape for securing to sample container.

**B. Safety Precautions**

It is the responsibility of the user of this sampling method to establish appropriate safety practices including, but not limited to, handling hot liquids, exposure to hazardous fumes and lifting heavy containers.

**II. Individual Items, Sets, Bundles or Containers**

- A. Randomly select the individual item, set, container, or bundle to be sampled.
- B. If the material is received in either containers or bundles, or if the material is fabricated to preformed sizes or lengths that exceed the required sample size, randomly select a length of material and cut a sample of the required size.
- C. When practical, place sample into sample sack or other suitable container. Place a properly completed, unsoiled sample identification form into an envelope. Securely attach the envelope to the container. Place a copy of the identification form inside the container, if possible.

**III. Liquid in Drums and Other Containers**

- A. Randomly select the drum or container to be sampled.
- B. Sampling Portions of Drums or Containers
  1. Agitate the material thoroughly and completely with an air or mechanical device prior to sampling.
  2. Take the sample by pumping, drawing through a spigot or dipping with a can.
  3. Place the sample into a 1 qt or 1 gal can or other suitable container. Place a properly completed, unsoiled sample identification form into an envelope. Securely attach the envelope to the container. Place a copy of the identification form inside the container, if possible.
- C. When sampling the entire drum or container, place a properly completed, unsoiled sample identification form into an envelope and securely attach the envelope to the container.

**IV. Powdered or Granular Solids in Sacks or Containers**

- A. Randomly select the sack or container to be sampled.
- B. Sampling Portions of Sacks or Containers
  1. Use a sampling tube in order to obtain uniform portions from the top, middle and bottom of the sack or container.
  2. Unless otherwise specified in the sampling schedule or specifications, obtain portions from at least 5 different sacks or containers, and composite to form a sample of the required size.
  3. Place the sample into a 1 gal can or other suitable container. Place a properly completed, unsoiled sample identification form into an envelope. Securely attach the envelope to the container. Place a copy of the identification form inside the container, if possible.
- C. When sampling the entire drum or container, place a properly completed, unsoiled sample identification form into an envelope and securely attach the envelope to the container.

V. Materials on Reels or Rolls

- A. Randomly select the reel or roll to be sampled.
- B. When practical, discard the first portion of the roll (one complete wrap) prior to sampling.
- C. For material other than rolled sheet-type material, cut a sample of the required size. To prevent strands of material, such as fiber glass roving, from unraveling when cut, tie or wrap the ends with thin wire or cord prior to cutting. Wrap the sample at least one inch from each end.
- D. For rolled sheet-type material, obtain the sample from the full width of the roll with both ends of the sample cut squarely across the strip.
- E. Where practical, roll the sample tightly without creasing.
- F. Where practical, place sample into sample sack or other suitable container. Place a properly completed, unsoiled sample identification form into an envelope. Securely attach the envelope to the container. Place a copy of the identification form inside the container, if possible.

VI. Other Materials

- A. Sample any material not specifically covered above at random by an appropriate method.
- B. Where practical, place sample into sample sack or other suitable container. Place a properly completed, unsoiled sample identification form into an envelope. Securely attach the envelope to the container. Place a copy of the identification form inside the container, if possible.