TRAFFIC PAINT AND GLASS BEADS
DOTD Designation: S 608-24

I. General

A. Equipment

1. One pint friction top can and lid (for traffic paint).
2. One gallon friction top can and lid (for glass beads in bulk containers).
3. Drum opener.
4. Mechanical agitator (Jiffy mixer type).
5. Clean sampling device.
6. Sample thief for glass beads.
7. Suitable markers for identification.
8. Forms, envelopes and tape for securing to sample containers.

B. Safety Precautions

It is the responsibility of the user of this sampling method to establish appropriate safety practices including, but not limited to, exposure to flammable and hazardous materials and lifting heavy containers and objects.

II. Traffic Paint

A. Sampling at an approved warehouse

1. Warehouse Responsibilities

   a. Notify the DOTD Laboratory in the district in which the warehouse is located and request sampling and testing for batch approval allowing adequate time for scheduling by the District Lab and testing by the Materials and Testing Section.
   b. Separate the materials to be sampled into individual manufacturer's batch numbers.
   c. Provide access to enable the District Lab personnel to randomly select a representative container and facilitate the marking of individual containers.
   d. Mechanically agitate the contents of the container selected by the District Lab personnel until the coating is homogeneous and there is no settled pigment in the drum.
   e. While agitating place 1 pt of the material into a 1 pt friction top can using a clean sampling device.
   f. As directed by the District Lab personnel, mark each container with the DOTD lot number.
   g. After approval of a manufacturer's batch of traffic paint, provide a Certificate of Delivery Form referencing the manufacturer's lot number and the Louisiana DOTD passing lab number with each batch shipped to the job site.
   h. If the batch is not approved, void the DOTD lot number by marking through the number.

2. District Laboratory Responsibilities

    a. Identify each manufacturer's batch number and material to be tested by DOTD lot number.
    b. Randomly select one container from each manufacturer batch number.
    c. Witness the warehouse personnel mechanically agitate the contents of the container selected until the coating is homogeneous and there is no settled pigment in the drum.
    d. Witness the warehouse personnel properly sample the material. (See II.A.1.e)
    e. Write the DOTD lot number and the manufacturer's batch number on the sample can.
    f. Once the samples are taken, have the warehouse personnel mark each container of that batch with the DOTD lot number.
    g. Place a properly completed, unsoiled sample identification form in an envelope and securely attach envelope to the sample container. Forward samples to the Materials & Testing Section for testing. The disposition of results shall be reported by the Materials & Testing Section to the District Laboratory.
    h. For any batch of material not conforming to specifications and receiving a failing report, return to the storage facility to ensure that the supplier of the material has voided the DOTD lot number.

3. Certificate of Delivery From the Warehouse

    Upon receiving approval and a passing laboratory number from the Materials & Testing Section, submit with each DOTD lot of approved material a Certificate of Delivery (CD) to the Project Engineer along with a copy to the Materials & Testing Section. The CD must be signed by an authorized representative of the company.

B. Sampling at Project Site (When not accompanied with a properly completed DOTD Certificate of Delivery indicating material was previously sampled at an in state warehouse and approved by the Materials and Testing Section or is questionable by the Project Engineer.)

1. Contractor Responsibilities

    a. Notify the project personnel and request sampling and testing for batch approval allowing adequate time for sample transportation and testing by the Materials and Testing Section.
    b. Separate the materials to be sampled into individual manufacturer's batch number.
    c. Provide access to enable the project personnel to randomly select a representative container.
    d. Mechanically agitate the contents of the container selected by the project personnel until the coating is homogeneous and there is no settled pigment in the container.

e. While agitating place 1 pt of the material into a 1 pt friction top can using a clean sampling device.

2. Project Engineer Responsibilities

a. Identify each manufacturer's batch number and material to be tested.
b. Randomly select one container from each different manufacturer batch number.
c. Witness the contractor personnel mechanically agitate the contents of the container selected until the coating is homogeneous and there is no settled pigment in the container.
d. Witness the contractor properly sample the material. (See II.B.1.e)
e. Write the manufacturer's batch number on the sample can.
f. Place a properly completed, unsoiled sample identification form in an envelope and securely attach envelope to the sample container. Forward samples to the Materials & Testing Section for testing. The disposition of results shall be reported by the Materials & Testing Section to the project personnel.

III. Glass Beads

A. **Sampling at an approved warehouse**

1. Warehouse Responsibilities

a. Notify the DOTD Laboratory in the district in which the warehouse is located and request sampling and testing for approval allowing adequate time for scheduling by the District Lab and testing by the Materials and Testing Section.
b. Separate the glass beads into individual manufacturer's lot number.
c. Provide access to enable the District Lab personnel to randomly select a representative sack or container per manufacturer's lot and facilitate the marking of individual sacks, sealed pallets, or bulk containers.
d. Once the sack has been selected, mark each sack or sealed pallet of that lot with the DOTD lot number.
e. After approval of a manufacturer's lot of glass beads, provide a Certificate of Delivery referencing the manufacturer's lot number and the Louisiana DOTD passing lab number with each lot shipped to the job site.
f. If the lot is not approved, void the DOTD lot number by marking through the number.

2. District Laboratory Responsibilities

a. Identify each manufacturer's lot number to be tested by DOTD lot.
b. Randomly select one 50 lb. sack or bulk container from each manufacturer lot
c. Once the sack or bulk container has been selected, have the warehouse personnel mark each sack, sealed pallet, or bulk container of that lot with the DOTD lot number.
d. For lots of sacks, write the DOTD lot number on the sack which has been

selected as the sample.

e. For lots of bulk containers, obtain a sample as follows:

1. Take sample using the sample thieve as described in Figure 1, approximately 48 in. long. Prior to obtaining the sample, to avoid contamination, make certain the inside of the probe is clean by pulling the rubber hose from the outer tube and checking for any material on both the rubber hose and inside the probe, then place the rubber hose back into the probe.

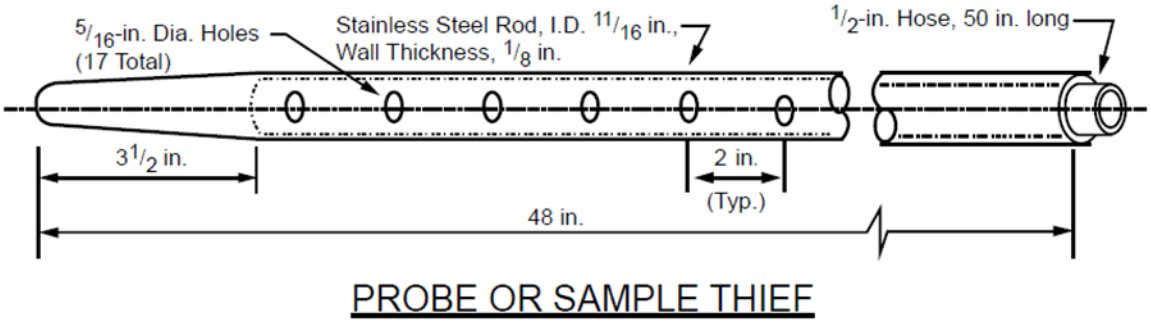
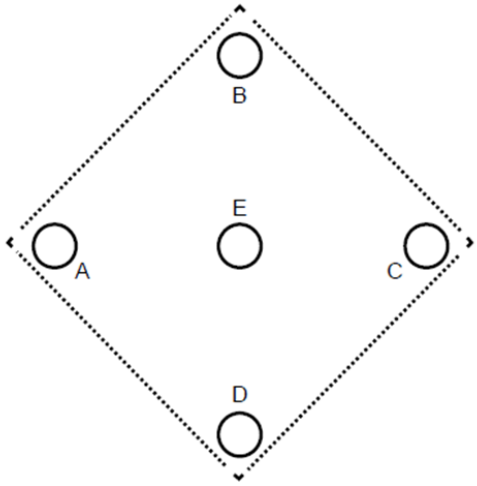


Figure 1—Sample Probe

2. Insert the probe vertically, with rubber hose inserted, slowly into one corner of the bulk container until it reaches the bottom.
3. Slowly remove the rubber hose from the probe allowing the material to flow into the probe through the bottom holes first. Slightly shake the probe as the rubber hose is removed in order to allow as much material as possible to flow into the probe.
4. Slowly remove the probe from the container and pour the sampled material into a gallon can.
5. Clean the probe and rubber hose of all material.
6. Repeat steps 2 - 5, sampling from three other corners (or locations) and the center of the container.



TOP VIEW OF BOX

Probe Sampling Sequence for

Retroreflective Glass Beads

f. Place a properly completed, unsoiled sample identification form in an envelope and securely attach envelope to the sack or sample container. Forward the sample to the Materials & Testing Section for testing. The results shall be reported by the Materials & Testing Section to the District Laboratory.
g. For any lot of glass beads not conforming to specifications and receiving a failing report, return to the warehouse to ensure that the supplier of the material has voided the DOTD lot number.

3. Certificate of Delivery From the Warehouse

Upon receiving approval and a passing laboratory number from the Materials & Testing Section, submit with each DOTD lot of approved material a Certificate of Delivery (CD) to the Project Engineer along with a copy to the Materials & Testing Section. The CD must be signed by an authorized representative of the company.

B. Sampling at the Project Site (When not accompanied with a properly completed DOTD Certificate of Delivery indicating material was previously sampled at an in state warehouse and approved by the Materials and Testing Section or is questionable by the Project Engineer.)

1. Contractor Responsibilities

a. Notify the project personnel and request sampling and testing for approval allowing adequate time for sample transportation and testing by the Materials and Testing Section.
b. Separate the materials to be sampled into individual manufacturer's lot

numbers.

c. Provide access to enable the project personnel to randomly select a representative sack or container.

2. Project Engineer Responsibilities

   a. Identify each manufacturer's lot number and material to be tested.
   b. Randomly select one 50 lb sack or bulk container from each manufacturer lot.
   c. Sample according to Section III.A.2, District Lab Responsibilities above.
   d. Place a properly completed, unsoiled sample identification form in an envelope and securely attach envelope to the sack or sample container. Forward the sample to the Materials and Testing Section for testing. The disposition of results shall be reported by the Materials and Testing Section to the project personnel.