TLT-605 (95)

MOISTURE RESISTANCE OF GLASS BEADS

1.0 SCOPE

1.1 This method describes the procedures used to determine the water repelling ability and free flow of glass beads used for retroreflective marking purposes in Traffic Paint.

2.0 APPLICABLE DOCUMENTS

2.1 AASHTO M247-81 Standard specification for glass beads used in traffic paint

3.0 APPARATUS

3.1 300 g sample
2 - 300 mℓ Erlenmeyer flasks
1 - pipette capable of delivering 20 drops per mℓ
1 - stopper
1 - stopper assembly (2 stoppers connected by a short 9.5 mm (3/8") inside diameter tube)
Distilled Water

4.0 PROCEDURE

4.1 Obtain a 300 g representative air dried sample and place in an Erlenmeyer flask.

4.2 Use pipette to add 5 drops of distilled water to sample.

4.3 Stopper the flask immediately and shake vigorously for one minute.

4.4 Remove the stopper and connect the flask mouth to mouth to the other flask using the stopper assembly in an hour-glass fashion.

4.5 Invert the entire two flask assembly (figure 1) to allow the beads to flow until the upper flask is empty. The flask may be gently tapped to initially start the flow of beads after which the beads should flow without further agitation.

4.6 Observe the flow characteristics of the beads by watching if they flow continuously.

4.7 If the beads fail to flow continuously, repeat step 4.5 when the upper flask is empty.

5.0 SPECIFICATION and REPORT

5.1 If the beads fail to flow continuously after inverting the assembly 3 times, report the beads as unacceptable.

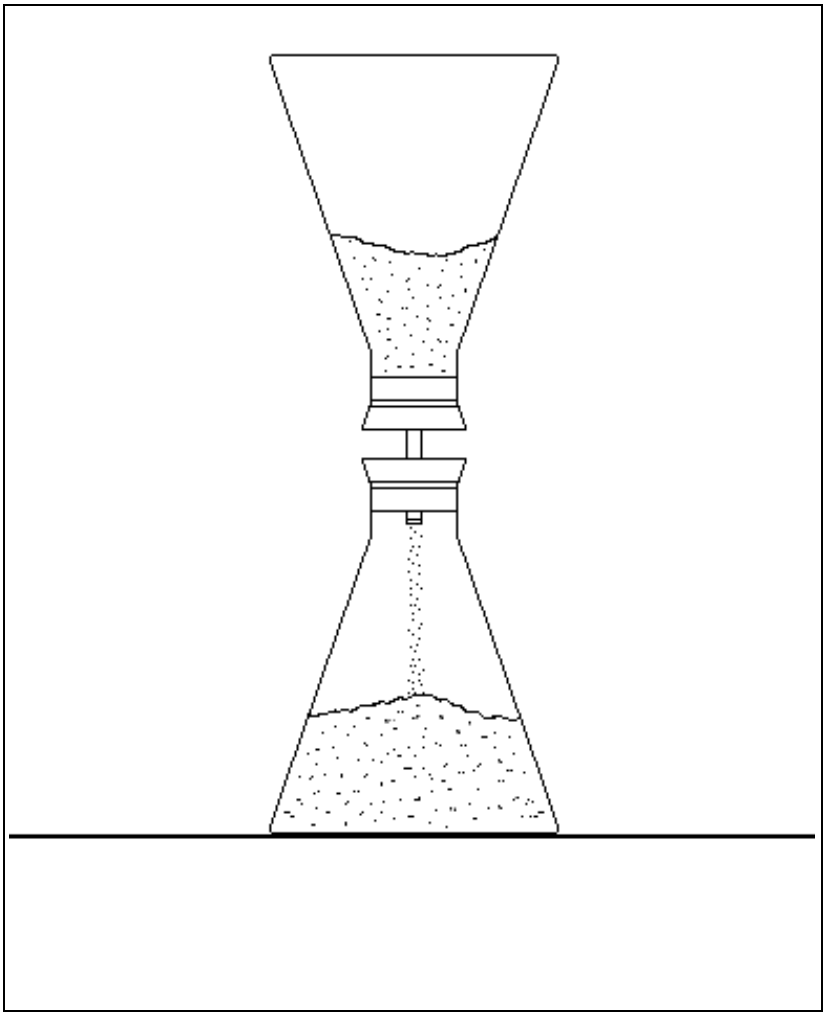

Figure 1