TLT-603 (02)

REFLECTIVITY OF GLASS BEADS

1.0 SCOPE

1.1 This method describes the procedures used to determine the percent of reflective round glass beads based on microscopic count used for retroreflective marking purposes in Traffic Paint.

2.0 APPLICABLE DOCUMENTS

2.1 CGSB 1-GP-71 Method 149.1 Imperfections in glass beads

2.2 TLT-602 Roundness of Glass Beads

2.3 TLT-604 Sieve Analysis of Glass Beads

3.0 APPARATUS AND PROCEDURE

3.1 The equipment and procedures used are as per those used in the above mentioned publications with the following modifications:

3.1.1 Test true sphere bead samples from TLT-602.

3.1.2 Use a strip of clear tape at the bottom of the sieve which the material in the size fraction to be tested passes.

4.0 CALCULATION AND REPORT

4.1 Percent Good Beads (each size fraction) - Calculate the percentage of Good Beads by dividing the count of Good Beads by total count of Good plus Bad multiplied by 100 for each bead size fraction.

4.2 Percent Good of Percent Retained (each size fraction) - Calculate by the following formula:

= [(%Good) * (%Retained from sieve analysis)]/100 for each fraction.

4.3 Total Percent Good Beads - Calculate by the following formula:

= [(Cumulative %Good of %Retained) / (Cumulative %Retained)] * 100

4.4 Percent Reflective Beads - Calculate by the following formula:

= (%Round Beads * Total %Good Beads) / 100

5.0 SPECIFICATIONS

5.1 At Least 70% shall be Reflective Beads.