# Test method T854

Glass bead content of thermoplastic roadmarking material

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# Revision Summary

| Ed/Rev Number | Clause Number | Description of Revision | Authorisation | Date |
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Note that Roads and Maritime Services is hereafter referred to as 'RMS'.

The most recent revision to Test method T854 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

# Test method T854

# Glass bead content of thermoplastic roadmarking material

## 1. Scope

This method sets out the procedure for determining the percentage of glass beads in thermoplastic roadmarking materials. It is based on BS3262: Part 1: Appendix D4.

## 2. Principle

The mineral content greater than 425 $\mu$m in size is placed at the top end of an inclined plane in such a way that only the spherical glass beads roll down to the bottom.

## 3. Apparatus

(a)   425 µm AS sieve with pan and lid.

(b)   Metal tray of approximate dimensions 150 mm x 350 mm inclined at an angle 5±1° to the horizontal or inclined vibratory table as specified in test method T1207.

(c)   Small soft bristle brush.

## 4. Procedure

(a)   Recombine all of the material collected on the sieves and in the pan in Method T855 and place in the 425 µm sieve. Shake for 20 minutes.

(b)   Place the material retained on the 425 µm sieve in increments at the top end of the inclined metal tray or vibratory table.

(c)   Spread out the material using the brush so that the spherical glass beads are able to roll down to the bottom of the slope.

(d)   Carefully brush the glass beads into a tared weighing bottle or similar container and weigh.

(e)   Let mass of glass beads = m (g)

## 5. Calculations

(a)   Estimate the mass of glass beads (M) in the original sample taken for binder content determination (Method T856) as follows:

$$\text{Glass Beads in Original Sample (M)} = \frac{m}{0.7}$$

NOTE: The factor of 0.7 gives a correction for losses resulting from the existence of some non-round beads and some beads less than 425µm.

(b)   Calculate the percentage of glass beads in the material as received as follows:

$$\text{Glass Bead Content (\%)} = \frac{M \times 100}{Y}$$

Y = mass in grams of sample taken in T856.

## 6. Reporting

Report the percentage of glass beads in the original sample to the nearest percent.