

Instrument: Pyknometer

Density is defined as weight per unit volume at a specified temperature. Density are used for quality control, since error in paint composition will result in different density readings.

Procedure:

Weigh cleaned density cup empty and record weight

Temper density cup and test liquid (20°C +-0.5°C; 68°F+-1.0°F)

Fill density cup

Put cover on without tilting

Avoid air bubbles

Remove overflowing liquid carefully with absorbent cloth

Weigh filled density cup

Calculate density

Determination of density:

Density = $\frac{\text{weight of filled cup (g)} - \text{weight of empty cup (g)}}{\text{Volume of density cup (ml)}}$