

Measurement of Apparent Density

[SJ-MM-005]

Principal

Apparent Density is the weight of a unit volume of a material, determined by a specified method. With the **Dropping Box Method** for dry powders, it includes the voids existing between particles as well as the inherent voids within and on the surface of the particles.

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Supersedes prior issues

Quality Assurance

Test procedure

1. Weigh approximately 30g of the powder(the powder should be sieved through 200 mesh screen in advance).
2. Transfer the powder into 300ml cylinder.
3. Stopper the cylinder tightly with a rubber stopper.
4. Turn on the switch of the dropping box machine that raise and drop the cylinder automatically for 107 times.
5. Read the nearest whole cc, the volume occupied by the powder.

Calculations

$$\text{Apparent Density(g/cc)} = \frac{\text{Wt of Sample in Grams}}{\text{Final volume in cc}}$$



References

1. C.T.F.A Method C 7-1