

SUBJECT VOLUMETRIC DENSITY  
Determination for Carbonates

SUPERSEDED DATE

Supersedes former 34-9-3.

A method of obtaining the volumetric density of loosely packed carbonates is herein given.

## 1. APPARATUS

Spatula  
250cc graduate - tubular type  
250 g scale

## 2. PROCEDURE

- a. Break up carbonate, if necessary, with a mortar and pestle, so that no aggregates remain and it is in a fluffy condition.
- b. Take carbonate out of container on the spatula and place gently into graduate while tilted at an angle of about  $30^{\circ}$  with horizontal.
- c. After a few portions of carbonate have been added, gently turn graduate to upright position so that no packing of carbonate occurs.
- d. Continue cycle of loading carbonate and turning graduate to upright position until it is estimated 200cc  $\pm$  1cc has been added without jarring or using spatula to level off the top.
- e. Weigh carbonate and divide weight in grams by 200 to obtain volumetric density.
- f. After a little experience one should be able to check a determination within 0.01 gram/cc.

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