Australian Standard®

Test methods for limes and limestones

Method 9.1: Solid content Convection—oven

1 SCOPE This Standard describes a method for the determination of the content of dry hydrated lime solids as a percentage of the wet mass of a milk of lime suspension.

NOTE: AS 2830.1 is recommended for use in conjunction with this test method.

2 REFERENCED DOCUMENT The following document is referred to in this Standard:

AS
2830 Good laboratory practice
2830.1 Part 1: Chemical analysis

3 PRINCIPLE A sample of a known mass of approximately 100 grams is dried at a specified temperature and for a specified time. The resultant dry residue is weighed and the percentage of dry mass is calculated.

4 APPARATUS

4.1 Drying oven—capable of maintaining a temperature of 80 ±10°C.

4.2 Balance—of at least 400 g capacity and accuracy of 0.03 g.

4.3 Suitable heat and corrosion resistant container—such as glass or porcelain, having a capacity of about 200 ml.

4.4 Desiccator—containing anhydrous silica gel.

4.5 Blender.

5 PROCEDURE The procedure shall be as follows:

(a) Determine the mass of a clean dry container to the nearest 0.01 g. Record as M_c.

(b) Using blender, thoroughly mix sample.

(c) Pour at least 100 g of well mixed sample into the container and determine mass to 0.01 g. Record as M_{wc}.

(d) Place container and contents in drying oven and dry for 24 h.

(e) Remove container and contents from oven and place in desiccator to cool.

(f) Determine mass of container and dried contents to 0.01 g. Record as M_{dc}.