

B. GENERAL TESTS

Loss on Drying

The Loss on Drying Test is designed to measure the amount of water and volatile matters in a sample when the sample is dried under specified conditions.

Hereinafter in the Monographs, such a specification as “not more than 0.50 % (105 °C, 3 hours)” indicates that when determined by drying 1 to 2 g of the sample, accurately weighed, at 105 °C for 3 hours, the loss in weight is not more than 0.50 % of the sample. Also such a specification as “not more than 0.50 % (0.5 g, not more than 1.3kPa, 24 hours)” indicates that when determined by placing about 0.5 g of the sample, accurately weighed, in a desiccator with silica gel as the desiccant and drying under pressure at 1.3kPa or less for 24 hours, the loss in weight is not more than 0.50 % of the sample.

Procedure Dry a weighing bottle for about 30 minutes under the prescribed conditions, allow to cool it in a desiccator if heated, and weigh it accurately. If the sample is large crystals or lumps, promptly crush it into particles not larger than about 2 mm in diameter and, unless otherwise specified, place 1 to 2 g into the weighing bottle, spread the sample so that the layer is not thicker than 5 mm, and weigh it accurately. Place the bottle in the drying oven, remove the stopper (placing it nearby), dry under the specified conditions, stopper again, take the bottle out of the oven, and weigh it again. If heated, unless otherwise specified, allow to cool it in a desiccator, and weigh it accurately. If the sample melts at a temperature lower than the specified drying temperature, dry it at a temperature 5 - 10 °C lower than the melting temperature for 1 to 2 hours, and dry it under the specified conditions.