

B. GENERAL TESTS

Residue on Ignition

The Residue on Ignition Test is designed to measure the weight of the residual substance when sulfuric acid is added to the sample and then ignited.

Hereinafter in the Monographs, such a specification as “not more than 0.10%” indicates that when determined by igniting 1 to 2 g of the sample, accurately weighed, with sulfuric acid at 450 - 550 for 3 hours, the weight of the residue is not more than 0.10% of the sample. Also, such a specification as “not more than 0.02% (5 g, 850 , 30 minutes)” indicates that when determined by igniting about 5 g of the sample, accurately weighed, with sulfuric acid at 850 for 30 minutes, the weight of the residue is not more than 0.02% of the sample. When the stipulation “dried substance” is given in the Monographs, the test is performed, using the sample dried under the conditions specified under Loss on Drying in the individual monograph.

Procedure Ignite a crucible of platinum, quartz, or porcelain under the conditions specified in the individual monograph for about 30 minutes, allow to cool in a desiccator, and weigh it accurately.

If the sample is large crystals or lumps, quickly crush it into particles not larger than about 2 mm in diameter and, unless otherwise specified, place 1 to 2 g of the particles in the crucible described above, and weigh it accurately. Moisten the sample with a small amount of sulfuric acid, then ignite slowly at a temperature as low as practical until the sample is almost incinerated, and allow to cool. Add again 1 ml of sulfuric acid, and heat slowly until white fumes are no longer evolved. Transfer it into an electric furnace, and, unless otherwise specified, ignite it at 450 - 550 for 3 hours. Cool the crucible in a desiccator and weigh it accurately. When the amount of the residue so obtained exceeds the limit specified in the individual monograph, ignite to constant weight.