Loss on Ignition

The Loss on Ignition Test is designed to measure the amount of moisture or impurities lost when the sample is ignited under the conditions specified in the individual monograph.

Hereinafter in the Monographs, such a specification as "18.0—24.0%" indicates that when determined by igniting 1 to 2 g of the sample, accurately weighed, at 450—550℃ for 3 hours, the loss in weight is 18.0—24.0% of the sample.

Also, such a specification as "not more than 10% (0.5 g, 1,000℃, 30 minutes)" indicates that when determined by igniting about 0.5 g of the sample, accurately weighed, at 1,000℃, for 30 minutes, the loss in weight is not more than 10% of the sample. When the stipulation "dried substance" is given in the Monographs, the test is performed, using a 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. Then, transfer it into an electric furnace, unless otherwise specified, ignite it at 450—550℃ for 3 hours, allow to cool in a desiccator, and weigh it accurately.