

THERMOGRAVIMETRIC ANALYZER (TGA)

Manufacturer: TA Instruments

Type/Model: TGA Q5000

Weight Range: 0.1 g (nominal)

Weighing Accuracy: +/- 0.1%

Temperature Range: 5°C to 85°C

Humidity Range: 0 to 98% RH

In thermogravimetry weight changes of a substance which occur during a controlled temperature program and in a defined gas atmosphere are measured.

In the Difference Thermal Analysis (DTA), temperature changes of a substance regarding to a reference temperature which occur during a controlled temperature program and in a defined gas atmosphere are measured. This system is capable of performing both of these measurements. In our lab we are measuring the weight loss of rayon fibers as they are being carbonized to help in understanding the characteristic changes of the fiber. This is done using LN₂ for the inert atmosphere to control the carbonization.

