

APPLICATION SHEET

STA Accessories – Sample Carrier for Suspended Samples

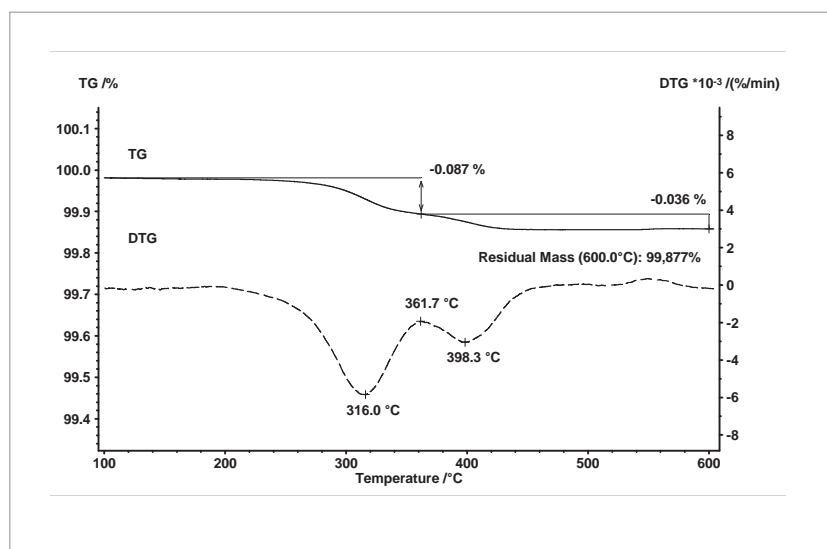
TGA Measurement of a Large Hanging Coated Glass Sample

The special TGA and TGA-DTA sample carriers for hanging or suspended samples allow perfect access to all sample surfaces by the atmosphere. The excellent long-term signal stability allows for the detection of very slow mass increases. The test atmosphere can be oxidative, corrosive or humid.

These Al_2O_3 sample carriers and sensors with Al_2O_3 frame are available for the STA 449 **F1/F3 Jupiter**® systems. The sample carriers are easy to handle and allow selection of the hanging wires according to the sample properties.



Sample carriers for hanging samples, see also *Accessories for Differential Scanning Calorimetry and Thermobalances*



Mass-loss behavior of coated glass sheets in air, STA 449 **F1 Jupiter**®

In this example, two sheets of a coated glass sample were pierced and fixed into the special TGA sample holder for suspended samples. The total sample mass amounted to 274.99 mg. The two sheets were heated up to 500°C in synthetic air (heating rate 5 K/min).

The improved contact between the sample surface and purge gas resulted in the detection of very weak mass-loss steps at 316°C (0.087%) and 398°C (0.036%).