

Tutorial Examples

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Disclaimer

This application handbook presents selected application examples. The experiments described were conducted with the utmost care. The results have been evaluated according to the current state of our knowledge. This does not however absolve you from personally testing the suitability of the examples for your own methods, instruments and purposes. Since the transfer and use of an application is beyond our control, we cannot of course accept any responsibility.

Preface

Thermal analysis is the name given to a group of techniques used to determine the physical or chemical properties of a substance as it is heated, cooled or held at constant temperature. In the three-volume handbook series on Thermal Analysis in Practice we discuss various aspects of thermal analysis in general.

The first volume gives an overview on all thermal analysis techniques and shows how they can be used to measure different kinds of thermal events. The second volume is a collection of tips and hints on how to obtain the best possible results from your measurements. The present, third volume includes a brief description of all thermal analysis techniques as well as a quick guide to method development in thermal analysis. The main focus, however, is put on the discussion of typical application examples.

Together with the "Tutorial Examples" volume also a "Tutorial Kit", consisting of 17 different test samples, can be purchased. These test samples, representing a large variety of materials frequently analyzed by thermal analysis, have been measured by us. The results of these measurements, its evaluation, and its interpretation are presented in this handbook.

The experiments described in this handbook are designed to demonstrate the possibilities that modern thermal analysis offers. Some of the samples were measured and evaluated using different techniques and methods. The aim is to encourage you to experiment with the samples and in this way help you to become familiar with thermal analysis.

The samples in the "Tutorial Kit" are not certified reference substances. The evaluation results presented here are typical results obtained for the particular sample and are not scientifically guaranteed data. It is quite possible that some samples undergo slight changes during storage and might not give exactly the same results as shown in the text. We trust that this will not discourage you and hope that the measurements will serve as a source of inspiration for your own work.

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