# APPLICATION **SHEET**

Material Identification – *Identify* Software

PET Recognized by Means of *Identify*

The new *Identify* software which is an extension of the NETZSCH *Proteus®* software …

■ **… is** a unique DSC curve recognition and interpretation system providing results with a single click.

■ … is useful for material identification and quality control.

■ … is both easy to use and sophisticated

■ … includes a database with NETZSCH libraries for polymers as a basis as well as libraries that can be created by the user.

■ **…** manages measurements, literature data and classes, incorporating the user's knowledge.
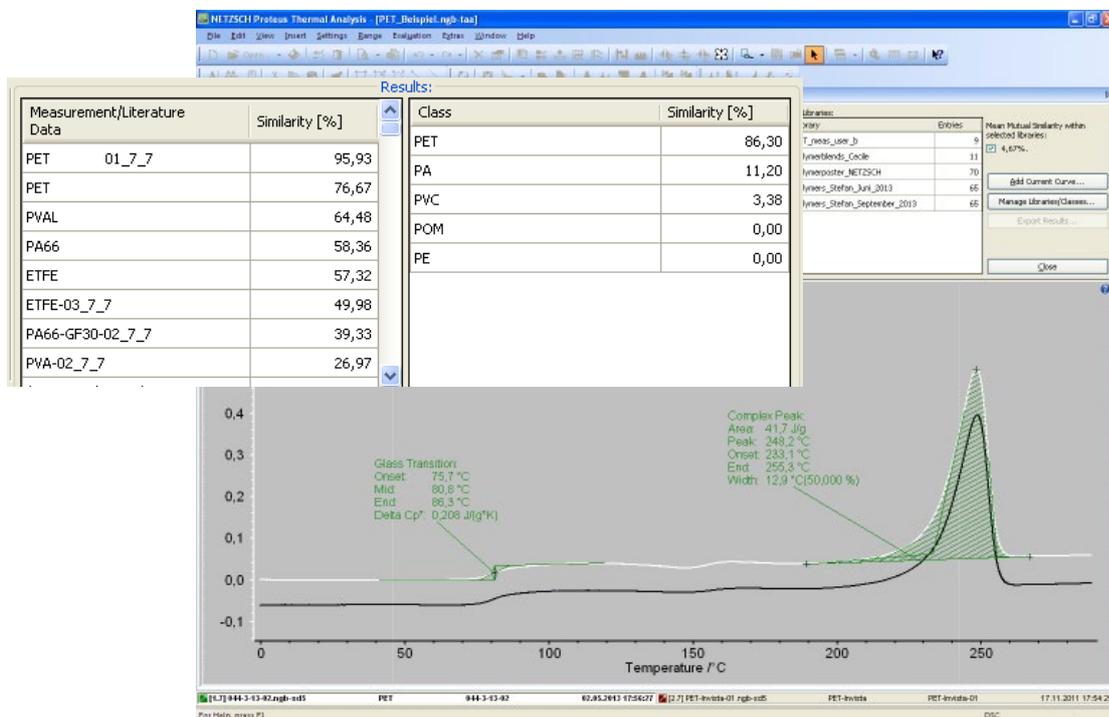
Identify results after only one click on a DSC curve; the white lines represent the unknown curve, the black lines the most similar database curve.

Material identification on an unknown sample is illustrated here where *Identify* was executed on a non-evaluated DSC curve. With a single click, the DSC curve was autonomously evaluated by the NETZSCH *Proteus®* software using *Auto-Evaluation*, and the *Identify* results were immediately displayed: The hit-list on the left shows measurements and literature data from the database sorted according to their similarity to the unknown DSC curve. On the right, a second hit-list indicates the similarity between the "unknown" and defined classes which are groups of measurements and literature data wihtin the database. In this example, the glass transition around 80°C and the melting peak around 250°C detected in the unknown DSC curve clearly allow the measured sample to be identified as PET. As a basis for the database, libraries with measurements and literature data from the NETZSCH "Thermophysical Properties of Polymers" poster are supplied. Users can additionally create and manage libraries and classes of their own incorporating their own measurements and their knowledge, too

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