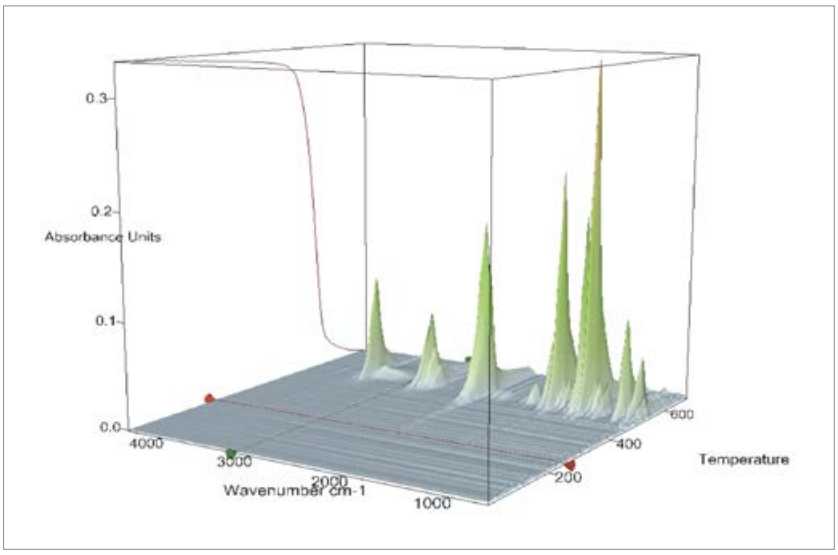
APPLICATION**SHEET**

POLYMERS – POLYMER MANUFACTURING

POLYCARBONATE (PC)

Polycarbonates are a particular group of thermoplastics. They are easily worked, molded, and thermoformed. They are called polycarbonates because these polymers have functional groups linked together by carbonate groups (-O-CO-O-) in a long molecular chain. The most common type of polycarbonate plastic is one made from Bisphenol A, in which groups from Bisphenol A are linked together by carbonate groups in a polymer chain. Polycarbonate is becoming more common in house wares as well as laboratories and in industry. It is often used to create protective features, for example, in banks as well as vandal-proof windows and lighting lenses for many buildings. Other products made from polycarbonate include sunglass/eyeglass lenses, compact discs, DVDs, and automotive headlamp lenses.



Instrument

TG 209 ***F1*** *Iris*® – FT-IR

Test Conditions

Temperature range	RT ... 700°C
Heating/cooling rates	20 K/min
Atmosphere	Nitrogen at 40 ml/min
Sample mass	7.3 mg
Crucible	Alumina
Sensor	Platinel

Results

The above figure shows the TG results of four different SiC qualities. The "new" SiC sample depicts no mass loss. At the recycled and used SiC samples some organic impurities remained which were driven out at higher temperatures. The used SiC showed the highest mass loss due to the largest impurity amount.

NGB · AS · 133-2006 · EN · 07/13 · Technical specifications are subject to change.

NETZSCH-Gerätebau GmbH
Wittelsbacherstraße 42 · 95100 Selb · Germany
Tel.: +49 9287/881-0 · Fax: +49 9287/881505
at@netzsch.com · www.netzsch.com

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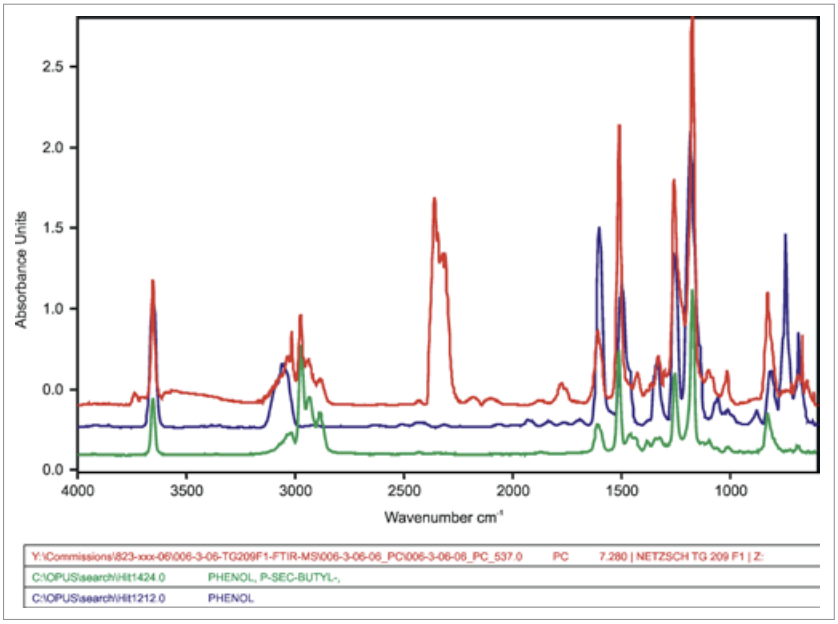

Instrument
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