

APPLICATION SHEET

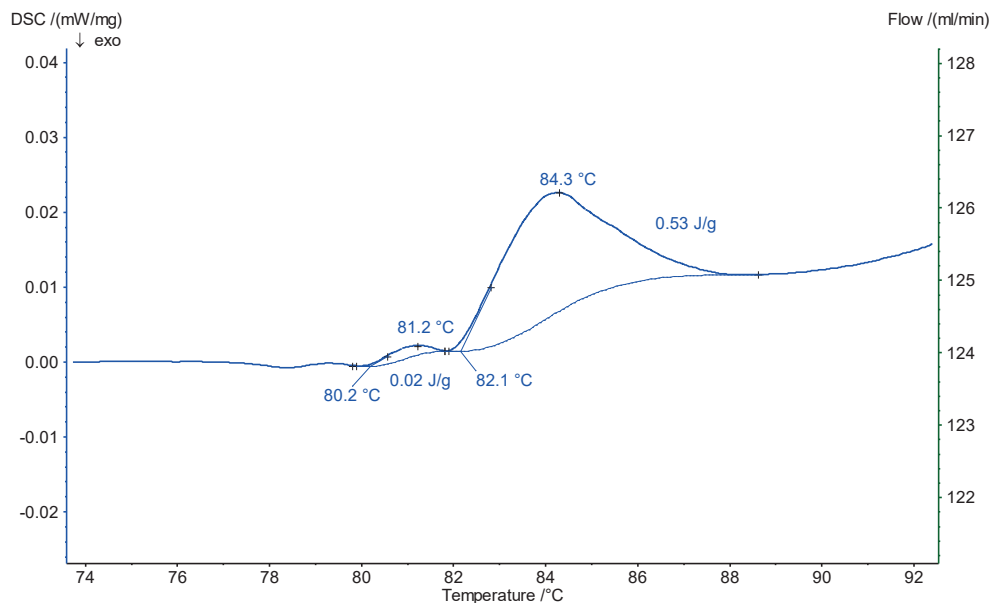
Ceramics · Automotive
DSC 404 F1 Pegasus®

DNA

Introduction

DNA is a long polymer of simple units called nucleotides which are held together by a backbone made of sugar and phosphate groups. This backbone carries four types

of molecules called bases and it is the sequence of these four bases that encodes information. The major function of DNA is to encode the sequence of amino acid residues in proteins using the genetic code.



Test Conditions

Temperature range: 5 ... 250°C
Heating/cooling rates: 5 K/min
Atmosphere: Nitrogen at 20 ml/min
Sample mass: 1.38 mg (+ 4.16 mg water)
Crucible: Al, closed

Test Results

Two endothermic effects were detected between 80°C and 90°C. The first one at 81.2°C (peak temperature) has an enthalpy of 0.02 J/g. The second one; occurring at 84°C; is associated with an enthalpy of 0.53 J/g. It is most probably due to the DNA denaturation.