

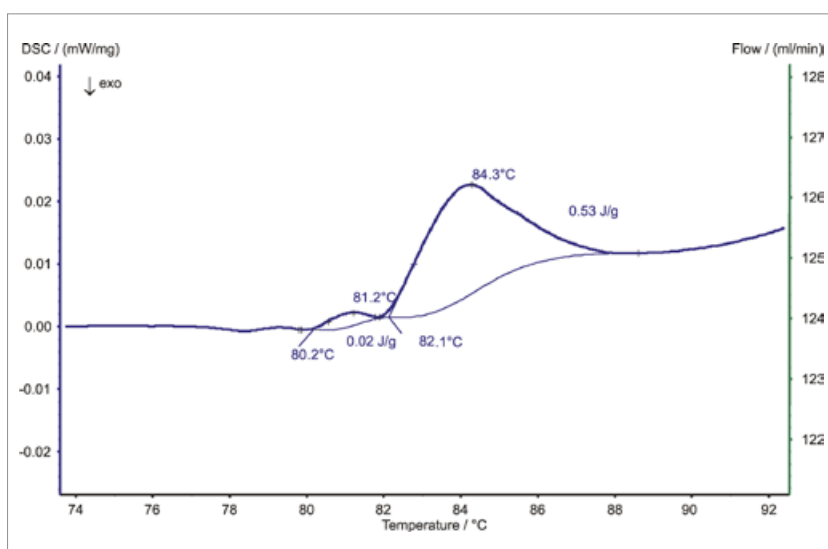
# APPLICATION SHEET

## ORGANICS – PHARMACEUTICALS

### DNA

DNA is a long polymer of simple units called nucleotides, which are held together by a backbone made of sugars 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.



#### Instrument

DSC 204 **F1** Phoenix®

#### Test Conditions

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

#### Results

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