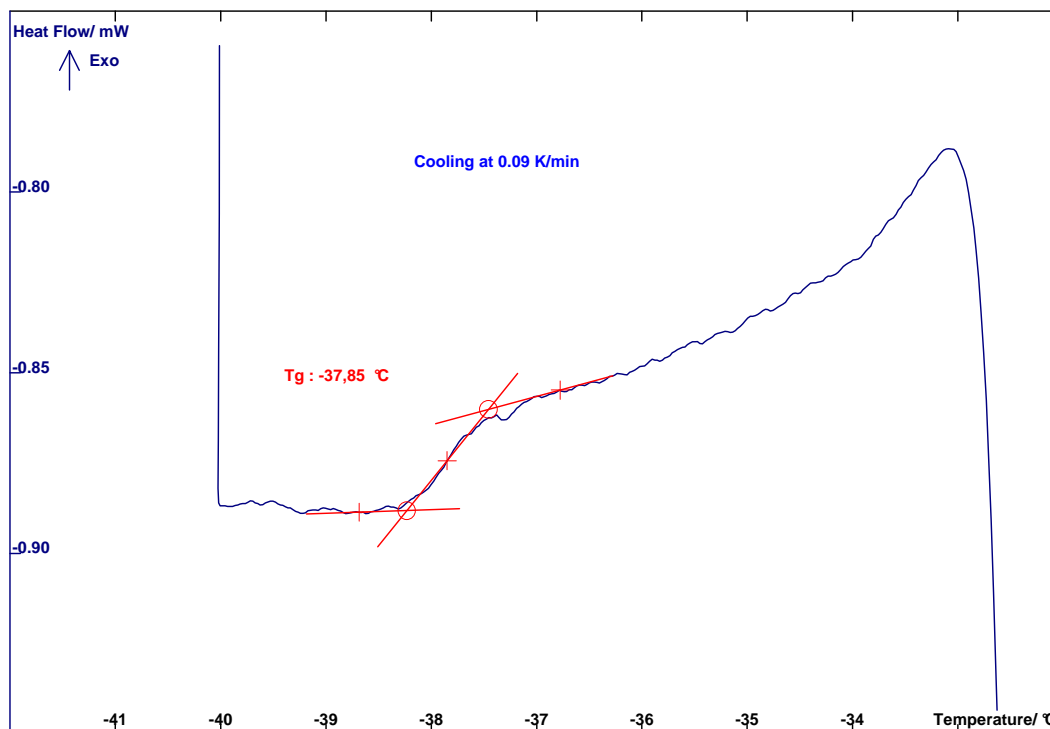


## Tg of a solution prior to its freeze-drying

### Introduction

Freeze-drying of a solution consists in first crystallizing it totally, then sublimating the formed ice on installing vacuum. In order to obtain a final product of good quality, it is necessary to install vacuum at a temperature lower than the glass temperature (Tg) of the frozen solution.



### Experimental

Instrument : micro-DSC VII

Sample : 365 mg of solution

Batch vessel

The temperature is programmed from -32°C to -40°C at 0.09 K.min<sup>-1</sup> : 5.4 K.h<sup>-1</sup>.

### Results

The DSC curve presents a Tg with an inflexion point at -37.85°C.

### Instrument

Micro DSC VII  
-45 to 120°C

