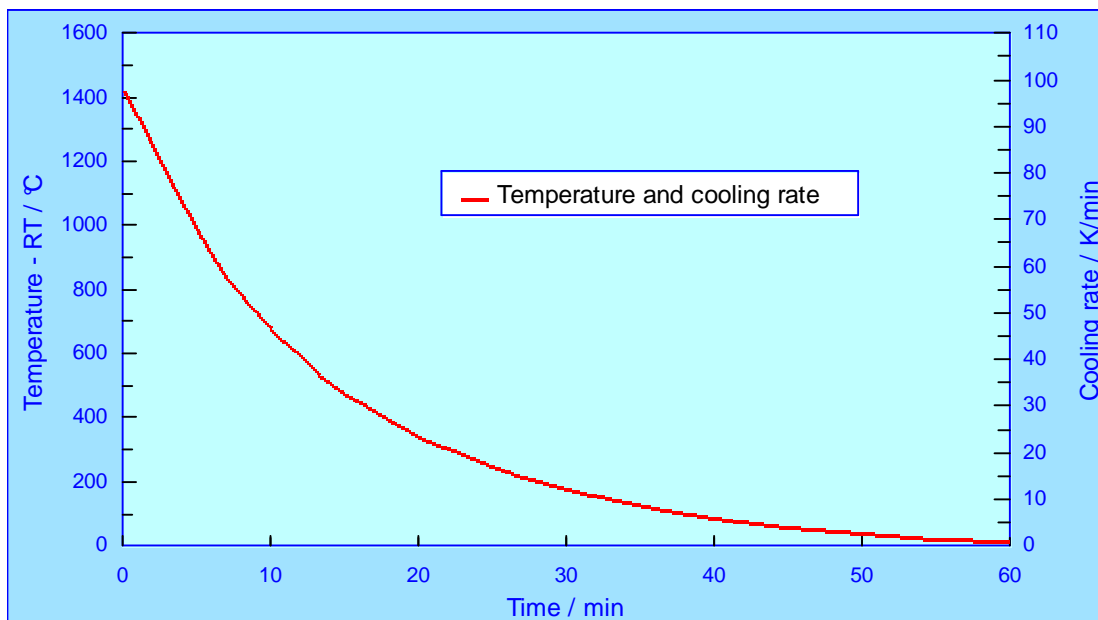


## Cooling curve of Labsys™ TGA-DSC



### Experimental

The temperature of the Labsys™ TG-DSC is recorded during a cooling of the instrument. At time zero, the set temperature is 1450°C then, it is suddenly changed to 0°C.

The chart presents the measured temperature subtracted from the room temperature.

Notices: The nature of the carrier gas has practically no influence on the cooling rate. The cooling is the same for Labsys™ TG-DTA, Labsys™ DSC, Labsys™ DTA or Labsys™ TG.

### Instrument

This « cooling curve » concerns the Labsys™ TGA-DSC (ambient to 1600°C)

### Results

The chart presents:

- the variation of temperature versus time
- the variation of cooling rate versus time.

Due to the choice of axes, the two curves are presented by the same line.

For instance, during a cooling from 1000°C down to 220°C, the initial cooling rate will be 69 K.min<sup>-1</sup> and the final cooling rate 15 K.min<sup>-1</sup>.

It will last 27 - 4 = 23 minutes.

