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# **THERMAL ABSORPTION KIT**

## **071**



**CENTRE FOR MICROCOMPUTER APPLICATIONS**

<https://cma-science.nl>

## Short description

The CMA Thermal Absorption Kit can be used for measurement of heating and cooling rates:

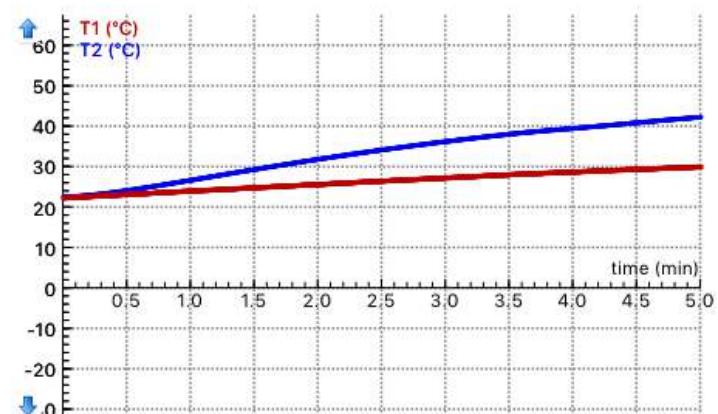
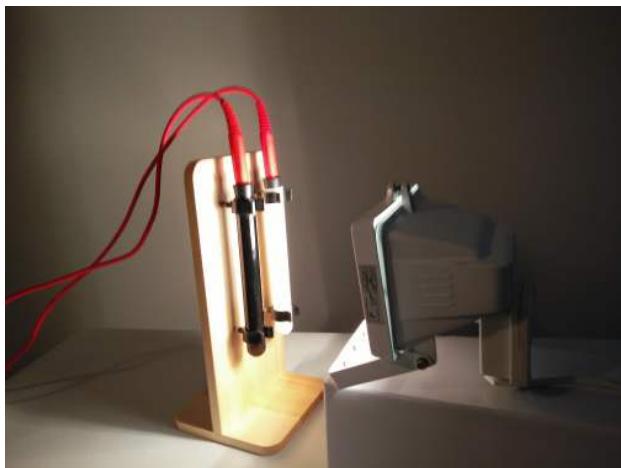
- by materials in different colors (black, white, transparent)
- by different materials (air, water or sand).

The kit consists of:

- Wooden holder.
- 4 glass test tubes: 1 painted white, 1 painted black and 2 transparent.
- 2 rubber one-hole stoppers for temperature sensors or thermometers (not provided in the kit).



The graph below shows an example of measurement results. A strong halogen lamp is used to heat the empty black and white tubes as shown on the photo below.



The sensor in the black test tube (blue graph) warms up faster than the sensor in the white test tube (red graph).

Check the Teaching Resources provided on the CMA website (<https://cma-science.nl>) to find the ready-to-go activity for this kit.

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**Warranty:** The Thermal Absorption Kit 071 is warranted to be free from defects in materials and workmanship for a period of 24 months from the date of purchase provided that it has been used under normal laboratory conditions. This warranty does not apply if the product has been damaged by accident or misuse.

**Note:** This product is to be used for educational purposes only. It is not appropriate for industrial, medical, research, or commercial applications.

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