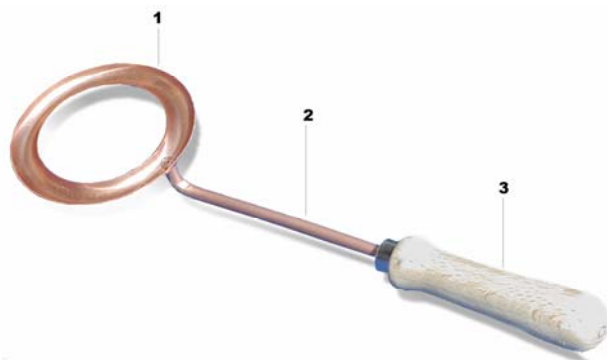


## Fusion ring 8497310

### Instruction sheet

06/06 SF



- 1 Fusion ring
- 2 Shaft
- 3 Wooden handle

### Safety instructions

Caution: Build-up of high temperatures. Danger of serious burns!

- Hold the apparatus only by the insulated handle.
- Set up the induction furnace on a heat-resistant surface.
- Switch off the mains coil immediately after the solder has melted.

### 2. Description

The fusion ring is used for demonstrating the application of the Joule effect (induction melting).

The fusion ring consists of copper sheet which is formed into a circular groove and attached to a wooden handle. In the experiment, the fusion ring acts as a secondary coil with a single winding in conjunction with mains coil 8497420 and transformer core with yoke 8497180 to form an induction furnace. Ordinary tin-lead solder is well suited for use in the experiment.

### 3. Technical data

Inner diameter:	57 mm
Length:	270 mm
Material:	Copper

### 4. Operation

#### Additionally required:

- 1 Mains coil 8497420
- 1 Transformer core with yoke 8497180

Tin-lead solder

- Set up the experiment as shown in Fig. 1.
- Put the solder into the fusion ring.
- Switch on the mains coil.
- Switch off the mains coil immediately after the solder has melted.
- Carefully remove the molten solder from the fusion ring.
- Disposal of the solder must be in accordance with local regulations.

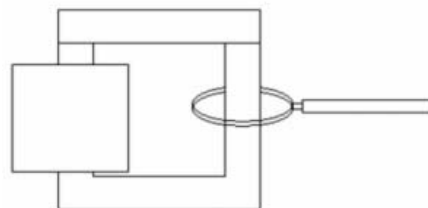


Fig. 1: Schematic diagram of an induction oven