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# Corning® LSE™ Mini Microcentrifuge

## Instruction Manual

CORNING

**Model No. 6770**



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### About This Manual

This manual is designed to assist in the optimal usage of the Corning LSE Mini Microcentrifuge (Model No. 6770). The manual is available in English, French, German, Italian, Portuguese, and Spanish at [www.corning.com/lifesciences](http://www.corning.com/lifesciences).

# Instruction Manual

## Corning® LSE™ Mini Microcentrifuge

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### General Information

The Corning® LSE™ Mini Microcentrifuge is supplied with two rotors, one for microcentrifuge tubes and one for 0.2 mL PCR strip tubes. The eight-place rotor is designed to centrifuge up to eight individual 1.5/2.0 mL plastic microcentrifuge tubes. The unit will also include adapters for the following tubes: 0.5/0.6, 0.4/0.25, 0.2 mL. The strip tube rotor is designed to centrifuge four 8 x 0.2 mL strip tubes. It will also accept up to 32 individual 0.2 mL microcentrifuge tubes. Both rotors are designed for applications requiring relatively low g-forces, such as microfiltration, cell separation and quick spin downs from the walls of tubes.

Please read this manual thoroughly before attempting to operate the microcentrifuge.

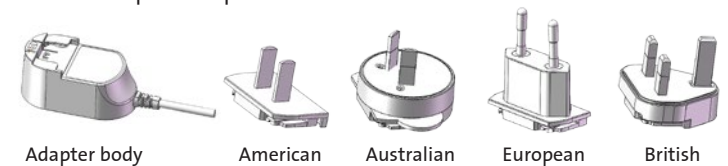
### Intended Use of the Equipment

For quick spin-down from walls or caps of centrifuge tubes.

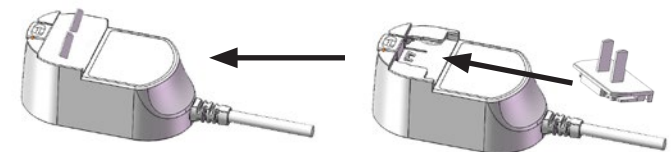
### Installation

1. Make sure to always install the microcentrifuge on a stable, flat surface only and place it near the electrical outlet.
2. Allow at least 20 cm from walls, 20 cm from ceiling, and 20 cm between other products.
3. Power adapter instructions

#### 3.1 Power adapter components



- 3.2 Assembly: Choose the correct plug type to match the local wall socket and push the plug into its position firmly.



## Operation

Before operating the microcentrifuge, be sure that the power switch on the back of the unit is in the “on” position. To begin a run, simply close the lid of the microcentrifuge. No other controls are required.

- ▶ **Fast Stop:** Press down and release the tab on the front of the lid. This will release the lid lock, allowing the lid to open and the rotor to come to a fast braked stop.
- ▶ **Gradual Stop:** Put the power switch in the “off” position, this will cut power to the motor and the rotor will come to a gradual stop.



**Caution:** Do not attempt to open the lid or remove samples until the unit has come to a complete stop. Once the lid has fully opened and the rotor has stopped, samples may be removed from the rotor.

Safe operation of the microcentrifuge requires that the rotor be loaded in a balanced fashion. Failure to load the rotor properly presents a hazardous condition and may damage the microcentrifuge. Individual tubes, strip tubes, and/or adapters must always be loaded symmetrically to ensure proper balance. Never run the microcentrifuge with only one individual tube or strip tube in place.

## Equipment Maintenance

The microcentrifuge should be cleaned periodically. Ensure that the unit is not plugged in. Use a damp cloth and a mild, noncorrosive detergent (pH <8). Do not immerse the microcentrifuge in liquid or pour liquids over it. Excessive amounts of liquid should be avoided. Liquid should not come in contact with the motor. After cleaning, ensure all parts are dried thoroughly before attempting to operate the unit.

## Rotors

The microcentrifuge is supplied with two interchangeable quick release rotors. No tools are required to exchange the rotors or attach them to the motor shaft. The rotors can be easily exchanged with one hand by way of the quick release system. Removal of the rotors is done by placing your thumb on top of the motor shaft and lifting up with two fingers underneath the rotor. Place the other rotor into position on the motor shaft and snap in.



8 place tube rotor



4 place strip rotor

## Safety Precautions

- ▶ **Never** use the microcentrifuge in any manner not specified in these instructions.
- ▶ **Never** operate the microcentrifuge without a rotor properly attached to the shaft.
- ▶ **Never** fill tubes while they are in the rotor. Liquid spillage may harm the unit.
- ▶ **Never** put hands in the rotor area unless the rotor is completely stopped.
- ▶ **Never** move the microcentrifuge while the rotor is spinning.
- ▶ **Never** use solvents or flammables near this or other electrical equipment.
- ▶ **Never** centrifuge flammable, explosive, or corrosive materials.
- ▶ **Never** centrifuge hazardous materials outside of a hood or proper containment facility.
- ▶ **Never** try to continue operating the microcentrifuge if the microcentrifuge stops working prematurely. Stop the microcentrifuge immediately by turning off the main power switch on the back side of the microcentrifuge. Wait one minute before turning on the main power switch to operate the microcentrifuge again.
- ▶ **Always** load the rotor symmetrically. Each tube should be counterbalanced by another tube. Weight of individual tubes may not exceed 3.0 g.
- ▶ **Always** place the microcentrifuge within easy access to an electrical outlet.
- ▶ **Always** use only microcentrifuge tubes made from plastic and designed to withstand centrifugal forces of at least 2,000 x g.


## Cleaning

Before using any cleaning or decontamination methods other than those recommended by the manufacturer, check with the manufacturer that the proposed method will not damage the equipment. To clean the microcentrifuge, use a damp cloth and a mild, noncorrosive detergent (pH <8). After cleaning, ensure all parts are dried thoroughly before attempting to operate the unit. Do not immerse the microcentrifuge in liquid or pour liquids over it.

## Questions and Service

Should you have a question about the microcentrifuge or require service for the unit, please use the contact numbers listed. Do not send a unit for service without first calling to obtain a repair authorization (RA) number and a decontamination form. Should the microcentrifuge require service, be sure to decontaminate it and enclose the decontamination form. The unit should be properly packed to avoid damage. Any damage resulting from improper packaging shall be the responsibility of the user.

## Specifications

Dimensions (LxWxH)	6.8 x 5.8 x 4.8 in. (17.4 x 14.8 x 12.2 cm)
Weight	2.43 lbs./1.1 kg
Electrical	AC 110-240V, 50/60 Hz, 0.35 A
Unit Input	24VDC 1A 
Speed	6,000 rpm
RCF	2,000 x g

## Environmental Conditions

- ▶ Indoor use only
- ▶ Altitude up to 2,000 m
- ▶ Temperature 5°C to 40°C
- ▶ Maximum relative humidity 80% for temperature up to 30°C decreasing linearly to 50% relative humidity at 40°C
- ▶ Pollution degree 2

## Spare Parts

Cat. No.	Description
6770-RT	Rotor, holds 8 x 1.5/2.0 mL tubes
6770-RTS	Rotor, holds 4 x 8 strip tubes
6770-RTA.20	Adapter, 0.20 for rotor (Cat. No. 6770-RT)
6770-RTA.25	Adapter, 0.25 for rotor (Cat. No. 6770-RT)
6770-RTA.5	Adapter, 0.5 for rotor (Cat. No. 6770-RT)
401025	Power Adapter, 24V

## Symbols and Conventions

The following chart is an illustrated glossary of the symbols that may be used in this manual or on the product.



The electrical warning indicates the presence of a potential hazard which could result in electrical shock.



**CAUTION** This symbol refers you to important operating and maintenance (servicing) instructions within the product Instruction Manual. Failure to heed this information may present a risk of damage or injury to persons or equipment.



This symbol identifies a Protective Earth (PE) terminal, which is provided for connection of the supply system's protective earth (green or green/yellow) conductor.

## Equipment Disposal – European Regulations



According to Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE), Corning® LSE™ Mini Microcentrifuge (Model No. 6770) is marked with the crossed-out wheeled bin and must not be disposed of with domestic waste.

Consequently, the buyer shall follow the instructions for reuse and recycling of waste electronic and electrical equipment (WEEE) provided with the products and available at [www.corning.com/weee](http://www.corning.com/weee).

## Limited Warranty

Corning Incorporated (Corning) warrants that this product will be free from defects in material and workmanship for a period of two (2) years from date of purchase. CORNING DISCLAIMS ALL OTHER WARRANTIES WHETHER EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. Corning's sole obligation shall be to repair or replace, at its option, any product or part thereof that proves defective in material or workmanship within the warranty period, provided the purchaser notifies Corning of any such defect. Corning is not liable for any incidental or consequential damages, commercial loss or any other damages from the use of this product.

This warranty is valid only if the product is used for its intended purpose and within the guidelines specified in the supplied instruction manual. This warranty does not cover damage caused by accident, neglect, misuse, improper service, natural forces or other causes not arising from defects in original material or workmanship. This warranty does not cover motor brushes, fuses, light bulbs, batteries or damage to paint or finish. Claims for transit damage should be filed with the transportation carrier.

In the event this product fails within the specified period of time because of a defect in material or workmanship, contact Corning's Customer Service at the following numbers: USA: 1.800.492.1110; Canada: 1.978.442.2200. For other regions of the world, visit [www.corning.com/lifesciences](http://www.corning.com/lifesciences) or see the included instruction manual for a list of Worldwide Support Offices.

Corning's Customer Service team will help arrange local service where available or coordinate a return authorization number and shipping instructions. Products received without proper authorization will be returned. All items returned for service should be sent postage prepaid in the original packaging or other suitable carton, padded to avoid damage. Corning will not be responsible for damage incurred by improper packaging. Corning may elect for onsite service for larger equipment.

Some states do not allow limitation on the length of implied warranties or the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights. You may have other rights which vary from state to state.

No individual may accept for, or on behalf of Corning, any other obligation of liability, or extend the period of this warranty.

For your reference, make a note of the serial and model number, date of purchase, and supplier here.

Serial No. \_\_\_\_\_ Date Purchased \_\_\_\_\_

Model No. \_\_\_\_\_

Supplier \_\_\_\_\_