

Practical tips for microscope care and maintenance

User care and maintenance:

- When the microscope is not in use, keep it covered with a cotton dust cover. Do not keep the microscope in a closed wooden box.
- Before using the microscope, wipe it with a clean cloth to remove any dirt and dust, and clean the lens with lens tissue or a separate piece of clean cotton cloth.
- At the end of each day's work, switch off the microscope and remove the plug from the mains socket.
- Clean the microscope thoroughly according to the manufacturer's instructions – mild soapy solution is suitable for most cleaning purposes.
- Use a rubber bulb to blow air over the microscope to remove dust particles.
- Remove oil residue from the lens with clean lens paper, soft toilet paper or soft cotton cloth.
- Clean the optics with a special solution of 40% petroleum ether, 40% ethanol and 20% ether.
- Ethanol can be used for cleaning mirrors, but do not use ethanol for cleaning lenses, because it dissolves the cement.
- Never dip the objectives in xylene or ethanol because the lenses will become unstuck.
- If the microscope is not going to be used for a few days, put it in a sealed, airtight plastic bag (made from thick polyethylene not PVC) with a packet of silica (silica absorbs moisture from the air). This will protect the microscope from fungal growth and corrosion.
- Do not store the microscope without the eyepieces unless the holes are plugged.
- Report any problems to your supervisor.



Keeping the microscope clean and dust free

Planned Preventive Maintenance:

- Periodically check and clean mechanical parts (adjustment, focus, stage etc).
- Remove any fungal growth.
- Lubricate according to manufacturer's instructions.
- Check optical alignment and spring load.
- Check the integrity of electrical grounding.
- Clean and inspect the microscope for signs of damage.