



Microscope Maintenance and Cleaning

Microscope is a precise optical instrument, it's very important for routine maintenance as well as operating correctly. Good maintenance can extend the microscope working life and ensure the microscope always in good working condition.

I. Maintenance and Cleaning

1. Keeping optical elements clean is important to ensure the good optical performance, the microscope should be covered by the dust cover when not working. If there is dust or dirt on the surface, use a blower to remove the dust or use a soft brush to clean the dirt.
2. Clean the objectives should use moist lint-free cloth or cotton swab with cleaning liquid. Don't use excessive liquid to avoid the clarity influence because of liquid penetration.
3. Eyepiece and objective are easily smudged by dust and dirt. When the contrast and clarity decreases or fog comes out on the lens, use the magnifier to check the lens carefully.
4. Low magnification objective has a big group of front lens, use cotton swab or lint-free cloth wrapped around the finger with ethanol and clean gently. 40x and 100x objective should be checked carefully with a magnifier, as the high magnification objective has front lens with a concave of small radius and curvature to achieve high flatness.
5. After using 100X objective with oil immersion, please make sure to wipe the lens surface clean. Also check if any oil on 40x objective and wipe it clean in time to make sure the image clear.

We usually use cotton swab dip with mixture of Aether and Ethanol(2:1) for optical surface cleaning. Clean from the center toward the edge in concentric circles can eliminate the watermarks. Wipe slightly and gently, don't use vigorous force or make scratches. After the cleaning, check the lens surface carefully. If you have to open the viewing tube to check, please be much careful to avoid any touch with the exposed lens near the bottom of the tube, the fingerprint will affect the observation clarity. We can supply the microscope cleaning kit as following:



6. Dust cover is important to make sure the microscope is in good mechanical and physical condition. If the microscope body is stained, use ethanol or suds for cleaning (Don't use organic solvent), DON'T let the liquid leak into the microscope body, which may cause inside electronic components a short circuit or burned.

7. Keep the working condition dry, when the microscope works in high humidity environment for long time, it will increase the chance of mildew. If the microscope must work in such humidity environment, the dehumidifier is suggested.

In addition, if mist or mildew is found on the optical elements, please contact us immediately for professional solutions.

II. Notice

Follow the below instructions may extend the microscope working life and maintain good working condition:

1. Adjust the light to the darkest before turning off the microscope.
2. When the microscope is power off, cover it with dust cover after the light source is cool about 15mins.
3. When the microscope turns on, you can adjust the light to the darkest if you will not operate it temporarily thus there will be no need to turn on or turn off the microscope repeatedly.

III. Useful tips for routine operation

1. To move the microscope, one hand holds the stand arm, and the other holds the base, two hands should be close to the chest. Don't hold by one hand, or swing back and forth to avoid the lens or other parts falling down.
2. When observing the slides, the microscope should keep certain distance between the edge of the laboratory platform, such as 5cm, in order to avoid the microscope falls down.



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3. Operate the microscope following the instructions, familiar with the component performance, master the relation of coarse/fine adjustment knob rotation direction and the stage lift up and down. Turn the coarse adjustment knob down, the eyes must look at objective lens.
 4. Don't take off the eyepiece, to avoid the dust falling into the tube.
 5. Don't open or change the optical element such as eyepiece, objective and condenser.
 6. The corrosive and volatile chemicals and pharmaceuticals, such as iodine, acids, bases etc., can not contact with the microscope, if accidentally contaminated, wipe it clean immediately.