

Microtome Blades

Instructions for Use

For use with microtomes and cryostats in the preparation of pathology specimens.

Microtome blades are used for sectioning a variety of sample types, including fixed, paraffin-embedded tissue and frozen tissue specimens.

Microtome Instructions For Use

- Warning: Care must be taken when handling microtome blades. Microtome blades are extremely sharp and should be handled with forceps, hemostat or similar tool.
- Set the clearance angle of the microtome's blade carrier to the suggested value found within the instrument's operation manual. This angle may vary depending upon whether the microtome blades being used are high- or low-profile.
- Carefully eject one microtome blade from its dispenser pack and place it into the blade carrier.
- Tighten the blade clamping lever of the carrier so that the microtome blade is held securely in place.
- Gently section the paraffin block to remove excess paraffin and to reveal a full tissue face or cross-section. This initial trimming step is sometimes referred to as "facing" or "roughing" the block.
- The paraffin block may require additional cooling at this stage and may be placed onto ice or a cooling tray for chilling purposes.
- When the paraffin block has been sufficiently cooled, it can be returned to the microtome for fine sectioning. A new microtome blade is recommended at this step in order to minimize tears and sectioning lines.
- Section paraffin blocks as usual. When retrieving sections near the blade, be sure to utilize forceps (or similar tool) in order to keep fingers at a safe distance from the blade.
- If tears, lines, rips, or other artifacts appear within the sections, move to a fresh portion of the blade or replace with a new blade. Dull microtome blades can cause paraffin sections to compress and form wrinkles.
- Dull / used microtome blades should be discarded into an appropriate sharps container.

Safety Tips

- Ensure that the user is fully trained in microtomy and is familiarized with the microtome's operation, as well as its safety features.
- Always use the microtome's safety features, such as the blade guard and handwheel brake, as outlined in the instrument's operation manual.
- Before cleaning the microtome, be sure that the microtome blade has been removed and discarded into an appropriate sharps container.
- When not in use, the microtome should not have a microtome blade within its carrier.

See container label for warnings and precautions.

Cryostat Instructions For Use

- Warning: Care must be taken when handling microtome blades. Microtome blades are extremely sharp and should be handled with forceps, hemostat or similar tool.
- Set the clearance angle of the cryostat's blade carrier to the suggested value found within the instrument's operation manual. This angle may vary depending upon whether the microtome blades being used are high- or low-profile.
- Carefully eject one microtome blade from its dispenser pack and place it into the blade carrier.
- Tighten the blade clamping lever of the carrier so that the microtome blade is held securely in place. Allow for the blade to come to temperature within the cryostat. Do not store extra blades within the cryostat, as moisture can cause dispense issues within the pack as well as oxidation of the blades.
- When both the blade and prepared sample have sufficiently cooled, gently section the frozen tissue chuck to remove excess cryostat medium and to reveal a full tissue face or cross-section. This initial trimming step is sometimes referred to as "facing" or "roughing" the chuck.
- A new section of the blade is recommended at this step in order to minimize tears and sectioning lines.
- Section frozen tissue as usual.
- When tears, lines, rips, or other artifacts appear, move to a fresh portion of the blade or replace with a new blade. Dull blades may cause frozen sections to compress and form wrinkles.
- Dull / used blades should be discarded into an appropriate sharps container.

Safety Tips

- Ensure that the user is fully trained in cryotomy and is familiarized with the cryostat's operation, as well as its safety features.
- Always use the cryostat's safety features, such as blade guard and handwheel brake, as outlined in the instrument's operation manual.
- Before cleaning the cryostat, be sure that the microtome blade has been removed and discarded into an appropriate sharps container.
- When not in use, the cryostat should not have a blade in its carrier.
- Warning: Fresh frozen samples constitute a potential biohazard risk not generally associated with paraffin block sectioning on a microtome. As such, handle all used cryostat blades accordingly.

See container label for warnings and precautions.

Order Information

Product	Profile	Qty.	REF
MB22 Premier Microtome Blade	Low	50/pack	3050822
MB35 Premier Microtome Blade	Low	50/pack	3050835
MX35 Premier™ Microtome Blade	Low	50/pack	3051835
MX35 Premier™ + Microtome Blade	Low	50/pack	3052835
MX35 Ultra Microtome Blade	Low	50/pack	3053835
HP35 Coated Microtome Blade	High	50/pack	3150734
HP35N Ultra Microtome Blade	High	50/pack	3151735
HP35 Ultra Microtome Blade	High	50/pack	3153735
MX35 Ultra Microtome Blade (Sample)	Low	10/sample pack	3013835
MX35 Premier™ + Microtome Blade (Sample)	Low	10/sample pack	3012835
HP35 Ultra Microtome Blade (Sample)	High	10/sample pack	3113735
MX35 Ultra Microtome Blade (Japan)	Low	50/pack	3053835J
MX35 Premier™ + Microtome Blade (Japan)	Low	50/pack	3052835J
MX35 Premier™ Microtome Blade (Japan)	Low	50/pack	3051835J
HP35 Ultra Microtome Blade (Japan)	High	50/pack	3153735J
HP35 Coated Microtome Blade (Japan)	High	50/pack	3150734J
Edge-Rite™ High-Profile Microtome Blades	High	50/pack	4275H
Edge-Rite™ Low-Profile Microtome Blades	Low	50/pack	4280L
High-Profile Disposable Blades	High	50/pack	1001259
Coated High-Profile Disposable Blades	High	50/pack	1001593