

Mounting Wax Products

Mounting Wax, Clear Stick (#71-10040)

Clear mounting wax provides a quick and strong bond between samples and fixtures for cutting and/or polishing. Best if used for smaller sample surfaces to provide a uniform thickness. Acetone can be used to dissolve/remove the wax after use, as well as to thin the wax for improved sample registration. For ease of use, apply the wax to a heated fixture.

Typical Applications:

- Lapping and polishing optical, ceramic and semiconductor components
- Dicing
- Mounting cross-sections for SEM/TEM analysis



<i>Technical Information – Mounting Wax</i>	
Melting Temperature	50 °C
Flow Point	75 °C
Viscosity	25,000 cP @ 75 °C
	5,000 cP @ 100 °C
	2,000 cP @ 125 °C
Solvent	Acetone

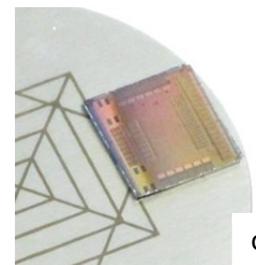
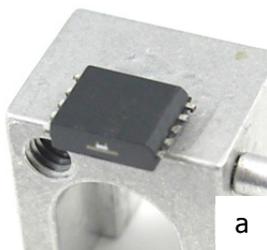
Instructions for use:

1. Heat a fixture on a hot plate at 150 °C.
2. Place a small amount of mounting wax on the surface of the fixture.
3. Once the wax is soft, place the sample on the fixture.

Note: For an ultra-thin layer, dip a cotton tipped applicator in acetone and run it along the wax layer until the wax appears hazy and without clumps.

4. Remove the fixture from the hot plate and allow it to cool at room temperature.
5. To remove the sample after preparation, place the fixture back on the hot plate and reheat the wax. Once the wax is soft, remove the sample; the wax can be reused.

Note: Do not quench the fixture to cool the wax; the wax may become brittle, causing the sample to break off. For some samples, a mounting leveling press (#120-30020) can be used to even out and thin the wax layer, improving registration between the sample and fixture.



Mounting wax was used to secure a) a package to a Cross-Sectioning Paddle, b) silicon to a TEM Wedge/FIB Thinning Paddle, c) an IC to a standard Parallel Polishing Fixture.

Sheet Wax (#71-10400)

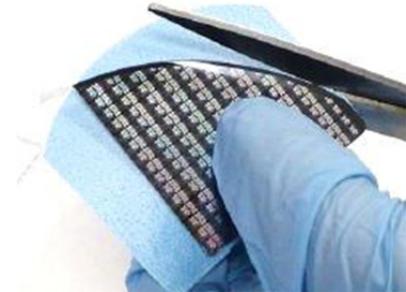
It provides uniform distribution of wax to improve registration accuracy of the sample to the fixture. Best if used with larger sample surfaces to make it easier to maintain uniformity over the whole surface area. Easily cut out and place the film on a non-heated fixture before melting.



Typical Applications:

- Dicing
- Thin sections
- Parallel delayering

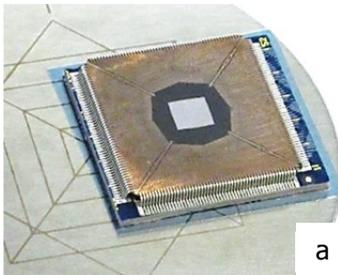
<i>Technical Information – Sheet Wax</i>	
Flow Point	100 °C
Tensile Strength	120 psi
Shore Hardness	80 A
Solvent	Wax Dissolver



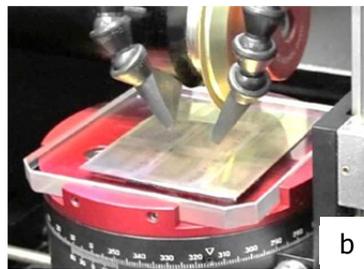
Instructions for use:

1. Cut out the sheet wax to fit the required sample shape.
2. Remove the lining from the back of the sheet wax, place the wax on a fixture/paddle and place the sample on the wax.
3. Place the fixture/wax/sample stack on a hot plate at 150 °C.
4. The wax will be completely melted when all the bubbles have spread out creating an even uniform layer.
5. Remove the fixture from the hot plate and allow it to cool at room temperature.
6. To remove the sample after preparation, place the fixture back on the hot plate and reheat the wax. Once the wax is soft, remove the sample. Sheet wax is not as effective after the first use, since the wax layer has already been thinned out.

Note: Do not quench the fixture to cool the wax; the wax may become brittle, causing the sample to break off. This wax is more resistant to acetone, so Wax Dissolver can be used to remove the wax from the sample and fixture after use.



a



b

Sheet wax was used to secure a) a package to 3" Parallel Polishing Fixture b) a silicon wafer to a glass insert for dicing

Wax Dissolver (#71-10210)

Use Wax Dissolver for thinning or removing Sheet Wax. It can be applied directly to the wax with a cotton-tipped applicator or wipe.



Wax Dissolver