

TECHNICAL NOTES

DIAMOND AND SAPPHIRE KNIFE CLEANING TOOLS Product No. 122-10, 122-20

Material specially developed for cleaning debris from diamond knives. Works also very well on sapphire knives, scalpel blades, microtome blades, Vibratome blades, diamond scribers and minitools.

This PVA sponge material tip wicks liquids instantaneously to make a safe and sure cleaning tool. May be used many times and they are safer to use than wooden sticks and most other cleaning tools.

The PVA does not expand with alcohol so it can be used in its rigid form by dipping in reagent alcohol only; or it can be expanded using clean water and then dipped in reagent alcohol. The PVA sponge material can be allowed to dry and stiffen, then dipped in reagent alcohol. Dipping the expanded PVA in alcohol can speed up the drying time required to make it rigid.

Available in two forms:

=

Ħ

22

п

п

ш

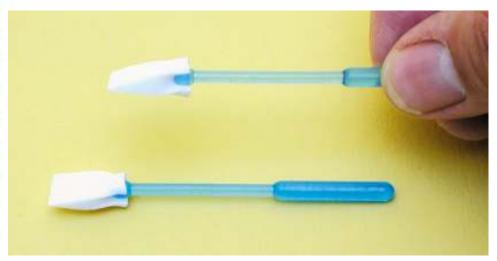
22

21

32

12

- Wedged tip on a plastic holder (pk/20) for safest use.
- Block with rounded ends (pk/5) $1-1/2 \times 3/4 \times 1/2$ " (38x18x13mm)





122-20 CLEANING BLOCK

122-10 CLEANING TOOL

The cleaning instructions below can be used with either form

Your diamond or sapphire knife is made from a single crystal. It has a remarkably sharp and uniform edge because it is extremely hard and its crystalline structure is very regular.

Nevertheless these characteristics also result in an edge where the tip of the edge is very thin and delicate. To prolong the life of this edge, never touch it with any solid object. Use the following guidelines:

- 1. Avoid touching the edge when inserting or removing the knife.
- 2. Don't contact the edge with any tools when operating your microtome.
- 3. Safely store the blade in its box when not in use.

122-10, 122-20 TN V2 07242007

Page 1 of 2



The best sections come from a clean environment. Keep your knife clean by:

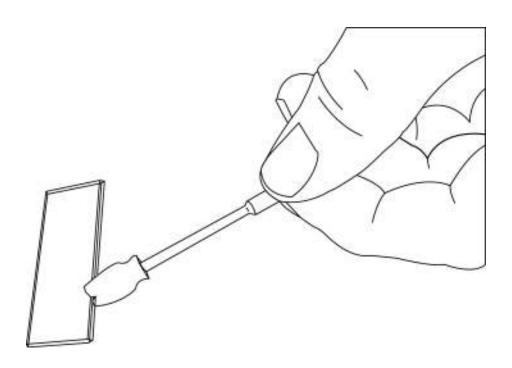
- 1. Using clean water, buffers or reagents in your microtome.
- 2. Rinsing and wiping the reservoir and stage of your microtome between use.
- 3. Preventing sections from drying on the knife.

If you have sectioning problems, especially knife marks, a dirty knife may be one of the causes. Clean the edge using a Diamond Knife Cleaning Tools, Product No. 122-10 or 122-20, following the steps below.

- 1. Premoisten the PVA sponge material with clean water and dry if desired to achieve the desired shape and stiffness.
- 2. Dip the PVA sponge material in reagent alcohol.
- 3. Gently drag the tip of the PVA sponge along the side of the knife, parallel to the edge.
- 4. Repeating on the other side of the blade and allowing to air dry.

Alternatively method below while viewing the knife edge under a dissecting microscope.

- 1. Premoisten and expand the PVA sponge material with clean water, dip in reagent alcohol, and dry to achieve the desired shape and stiffness. **DO NOT USE DRY.**
- 2. Dip the expanded and dried PVA sponge material into reagent alcohol and shake or blot on filter paper to remove excess.
- 3. Press the PVA sponge against the edge of the knife as though to split the tip.
- 4. Using little force, wipe the spear tip parallel to the cutting edge, never obliquely or at a right angle.
- 5. Move across the entire length of the knife edge..
- 6. Use a fresh part of the spear and repeat in the opposite direction and allow to air dry.



122-10, 122-20 TN V2 07242007



Microscopy Products for Science and Industry

P.O. Box 492477, Redding, CA 96049-2477, U.S.A.

Telephone: 530-243-2200; 800-237-3526 (U.S.A. or Canada) • FAX: 530-243-3761

Email: sales@tedpella.com • Web Site: http://www.tedpella.com

Page 2 of 2