

**TOOLS, SUPPLIES AND MATERIALS you may need for the WORKSHOP IN ADVANCED VIOLIN REPAIR: RETOUCHING OF VARNISH, including Filling of cracks.**

**Bring along several cleaned violins (or violas) suitable for RETOUCHING OF VARNISH. Be sure that all cracks have been properly cleaned, glued and reinforced. Ideally cracks should already be filled-in.**

Most materials are produced/sold by HAMMERL (Germany), or Kremer Pigments, GEWA etc. or alike

Not knowing whether you bring a yellow, a red or brown instrument (or in between !) or if it has a shiny or dull/opaque varnish, hence, we listed most supplies needed for this course. Therefore, please use your own judgment.

You should bring along all presently owned materials and tools which are appropriate for RETOUCHING OF VARNISH, but you might include the following:

Set of scrapers (various sizes)

Burnisher (for scraper)

Small flexible spatula (such as thin glue knife) to mix colors, stainless steel (if available) : ARTIST SUPPLY house

Quantity of fine grit sandpaper \* # 400 or # 500 grit and micro-mesh / polysand 3600, 4000, 6000, 8000, 12000

Crack filler G.W. 464290, Matt lack (dull varnish) # GW 463450,

Colorless varnish (liquid) mixture of White Shellac and Sandarac 50/50 stored in small glass container, with lid

Colorless varnish (liquid)mixture of White Shellac, Sandarac & Copal 1/3 - 1/3 - 1/3 (in small glass container with lid)

All above mentioned **natural resins** available HAMMERL Product: # 4220, 4200, 4120,

Colorless Touch-Up varnish for **Oil & Spirit Varn.** , Hammerl # 1800 incl. solvent/thinner for varnish #1840

Small quant. of various POWDER/PIGMENT COLORS: (ALCOHOL / SPIRIT soluble colors)  
HAMMERL Product

Yellow # 3007 Golden yellow # 3001 Pure Yellow # 3035, Orange # 3034 Red # 3055  
Brown # 3009 Black # 3050 Blue # 3070 Green # 3095 ( avail.: KREMER PIGMENTS, )

Small quantity of **liquid color extract**: Hammerl Product: Yellow # 2901 , Golden-Yellow # 2902, Red # 2903,

Brown # 2904, Amber # 2905

**Natural Resins/Gums : (soluble in spirit)** Hammerl Prod.: Aloe # 5030, Turmeric # 5090,  
Dragon's Blood # 5105

Gamboge # 5160 Kamala # 5180, Red Sandalwood # 5240, Yellow Wood # 5170

**OR:** KREMER PIGMENTS (optional): Benzoe # 4030 (for polish) incl. polishing rag

THE ABOVE RESINS/GUMS NEED TO BE PULVERIZED, DILUTED IN ALCOHOL/SPIRIT  
(LIQUIFIED)

AND FILTERED (as per HAMMERL book) Violin Varnish

Optional: STAINS (Liquid) (water): Hammerl Products, # 8402, # 8421, #8422, #8423, # 8428,  
# 8431 Optional : Small

quant. of LYCOPODIUM (added to crack filler) # 7420

Optional: TUTTI GIALLI, to be prepared by you as per H. WEISSHAAR Book: Violin  
Restoration Manual pg. 206

Bottle of good grade denatured Alcohol: and Xylol (Xylene) for cleaning violin

Touch-up Brushes # 1, # 4, or 5, # 8 Hammerl (**round** pure red sable or red marder),

OR: Winsor & Newton (Kolinsky) Series 7 (quite expensive) Artist Supply store

Coloring board (retouching board) home made or possibly available at Artist Supply House

Small pieces of white Formica, approx. 10 x 15 cm (old table top formica-on 18 mm chipboard) for  
mixing colors

Tiny empty glass jars (with lids) to store custom mixed varnishes , **Nitrile gloves**

Paper towels and small quantity of Linen rags, one or two peg bushing sticks to put into E/button  
hole to hold violin

Rug or Towel to lay on workbench to protect violin. ? Shop Bench Light ?(clamp-on-bench-  
swing-arm type), spare bulb

Pencil, Notebook, Tape Recorder or still Camera (no movie camera, please)

\* 3 M Comp. Sandpaper # 400 & # 500 Tri-M-Ite Silicon carbide, available Better  
Paint/Hardware store

\*\* Micro-mesh\_Cloth sheets # 3600, 4000, 6000, 8000, 12000, or KREMER 70 Kit #  
10530