

Technical Exchange

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Applicators for PVA adhesive, cold fish glue, and similar adhesives

Characteristics of applicators in photo from left to right: The quantity of adhesive flow decreases with smaller spout while the desired precision of application is increased.

The two glue bottles shown on left allow fairly precise dosage. All three can suck up excess glue after pressure on bottle is released.

Left: Relatively small LDPE bottle (16 oz. container), recycled, with water bottle nozzle (easy to open and close). Availability: in this case, Whole Foods. Bottle formerly contained "BeeMaid" clover honey, Product of Canada.

Center: Dripless Glue Bottle. The glue dispenser is good for smaller-scale work. With a light squeeze of the bottle, glue is forced through a channel at the bottom of the airtight reservoir and up the spout. The 4 oz. bottle is supplied with two trimmable nozzles: flat for dispensing a strip of adhesive and conical for beads. Dripless Glue Bottle (4 oz.) available with spare nozzles and caps for \$5.80 at: Lee Valley www.leevalley.com or 1-800-871-8158.

Right: The bellows applicator did not prove to be as good for glue as hoped. It's hard to produce an even, continuous

flow. The fixed tip cannot be removed for filling or cleaning. However, this device may be of use for injecting (even viscous) liquids into cavities, as the pressure achieved is pretty high.

Easier to fill and clean and most precise is a Glue Syringe (not shown in picture). The half-ounce capacity is sufficient for many applications in conservation. The pointed tip is made of plastic and can be cut down to adjust the opening or to increase flow. It comes in two varieties. One with a slightly bent tip, which allows accurate placement is available from Garrett Wade 1-800-2212942 or www.garrettwade.com (3 syringes for \$4.75 – stock number 63J01.01).

A similar type with straight tip is available from Cole-Parmer. It is made of polypropylene. The disposable transfer pipette has a 12-mL capacity, graduated in 1.0-mL increments. Cutting tip can provide easier aspiration and accommodates different viscosities. Product number EW-06215-00 comes in a box of 50 for \$31.50 at www.coleparmer.com.

Note: An apparent advantage of using these applicators is to minimize the process of cleaning tools after application. Nonetheless, I do recommend spreading the adhesive evenly across the entire surface with a suitable brush. In the case of PVA the application of a thin coat ("brushing" it into the pores of all surfaces) will improve the bond.

