

Electronic Tool Tip #25 – Dispensing Bottles

I have found that I need to have certain liquid products ready to hand and available for immediate use while I am working with various repairs, including soldering and cleaning printed circuit boards (PCB's). While there are many ways to satisfy this need, I stumbled upon a method that has shown itself to be completely adequate and appropriate for my needs.

What I found, after some judicious searching, was a set of twelve clear plastic dispensing bottles (Figure 1) with gasketed caps that serve as the dispensing valves and tips for the bottles. These bottles are 6.4" overall height and 1.7" diameter, and are made of a soft flexible plastic. They each hold five fluid ounces or 150ml of whatever liquid the user decides to store there.

The liquids that I normally keep available on my bench include water, 99.9% isopropyl alcohol (IPA), denatured alcohol, acetone, and mineral spirits. All of these fluids are safe to store in these bottles, as the plastic used is impervious to damage from these solvents. I generally buy the solvents in quart- or gallon-size containers, fill the dispensing bottles, and then store the bulk cans or bottles safely in a fire-safe cabinet.

Experience has shown that it is absolutely necessary to properly label each bottle with its contents. I use a Dymo Rhino 5200 label printer with *black-on-clear* tape installed, and I place two labels on each bottle. I cannot stress the importance of this labeling of the bottles strongly enough! Because most of these solvents are water-clear, it is impossible to tell them apart visually without the labels. Common sense also tells us that we should also have readily-available copies of the MSDS (Material Safety Data Sheet) for each of the solvents so stored.



Figure 1 – Plastic dispensing bottle



Figure 2 - Cap valve operation detail

The bottles use intuitive twist-to-open/close dispensing valves that are integrated into their caps. The twist-open feature gives us some measure of flow regulation, allowing only a drop at a time to be released if so desired, or permitting a steady-stream flow of liquid from the bottle when needed.

These bottles are available online as a set of twelve bottles and caps from Amazon.com, at a price of \$12.99 (USD) plus shipping. Of course, the government has to get its share, so tax will also be applied. Point your browser to <https://www.amazon.com/dp/B08NJGZK8R> if you want to investigate this item for yourself.