

by JOHN SCHETTINO October 28, 2012

# CamelBak All Clear and Eddy Bottle review



The CamelBak All Clear UV purification system and Eddy every-day/outdoor bottle offer you two choices in portable liquid haulers. Both bottles consist of all BPA-free and ruggedly-constructed materials. They come with lifetime guarantees that don't cover damage due to use, just defects – but CamelBak does stand behind their products.

#### **Eddy: More Than A Basic Bottle**

Since the Eddy is the low-tech bottle, let's take a look at it first. You can get the Eddy in 0.75 or 1L capacities. The only difference is the size of the bottle, the opening/top/straw/bite valve is the same for both. In the picture below you can see the exploded parts:

The bottle is fairly thick and rigid, PBA-free plastic that didn't seem to mind getting tossed around at all. The straw and bite valve are thick and pliant with some give. According to the marketing materials, the bite value is "medical grade silicone" – which seems plausible. The bite valve requires firm but not insane bite pressure to open. I had no issues sucking down water mid-workout with this thing. The top has the flip down value that the bite valve slips over. It provided a completely spill-proof closure when flipped down. When flipped up, the bite valve provides nearly the same level of spill proof protection, but you can get some drops out if you try hard enough. The loop on top is rugged enough to carry



the weight of a full bottle dangling off a carabiner hooked onto your backpack.

# **Drinking 101**

You can use the Eddy with the straw, as a bite and sip through the straw bottle. Or you can remove the straw and tilt/pull to drink. Either worked fine. Cleanup was as easy as disassembling everything and tossing it all into the dishwasher. You can freeze the Eddy with liquid it in (leave about a quarter empty to avoid exploding the bottle.) The FAQs warn against using it with hot liquids because it's not a great idea to suck hot drinks into your mouth.

## All Clear UV Microbiological Water Purifier: When You Don't Trust the Water

The All Clear is a little harder for me to figure out. Functionally, it's made with the same materials as the Eddy, with the same performance. The All Clear comes with two tops – one is a basic screw on lid without any valve or straw – you're not meant to drink directly out of the All Clear it seems. The other top is the "business end" – it is a fairly bulky UV light



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with a decent-sized battery. On top is a LCD display showing the charge/battery status. There is an optional pre-filtration cap available for \$15 (I did not get a review unit), which I would suggest adding on if you plan on using this in the field.



The UV top charges via USB; the cable is provided, but you must supply AC/ Auto to USB power adaptor or use a powered USB port to charge it. Charge times were a few hours with 1A power sources; obviously this may vary if you are using less powerful sources.



Once it's charged up, you're ready to go. Fully charged, it delivered twenty 60-second purification cycles before the battery level moved a notch, which was enough to convince me you could expect to be able to process more than 20 litres on a charge – enough for several days away from power. If you are planning a longer stint away from the grid, a solar charger might come in handy.



#### **Shaken, Not Stirred**

The All Clear states that it is able to "neutralize microbiological contaminants to EPA standards" in 60 seconds. In order to do that the liquid you are processing must be clear, free of ice, and you must agitate the bottle to move the water to the top of the bottle where the UV light is during the

60 second cycle. The UV light has a hard lifetime of 10,000 cycles – which is several years of daily use. The actual process of purifying water is simple enough and very fast – fill, attach the top, press power, and then flip the All Clear up and down for 60 seconds.

I would trust this to purify tap water, well water, and very clear river/lake water that is known pollution-free, but it won't take care of pollutants, nor will it filter out anything (hence the suggestion to get the filter add-on.) You're also going to need to take care to not contaminate the just purified water since the only water that is processed is the water inside the bottle. The low-tech solution to purification is to use any one of a number of tablet systems – these work about as well, but can take up to four hours to safely kill everything in a litre of water. There are other systems that use a combination of ultra-filtration and carbon filtration to remove chemicals and other pollutants in addition to pathogens. With the All Clear you won't get that second processing step – your water will be free of living critters, but whatever else was dissolved in it will still be present after processing.

### **Stay Thirsty**

The CamelBak bottles provide high quality liquid hauling and purification options for your hydration needs. If you've run through several inexpensive drug store water bottles and aren't happy with how they hold up to daily use, you'll find Eddy a far more durable bottle. If you do a lot of travelling where there is access to unpolluted but poorly treated water, the All Clear is a relatively compact and fast way to zap your water before drinking it.



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**Product Information** 

**Price:** Eddy .75L \$15 (other models vary from \$13 to

\$30); All Clear \$99

Manufacturer: CamelBak

**Requirements:** Liquid (for the All Clear, sketchy liquid)

USB power to charge the All Clear.

**Pros:** Eddy: high quality PBA-free liquid transporter

with sport/spill resistant top.

All Clear: high quality water purification using

UV light in a minute.

**Cons:** With the All Clear, uou really want to be sure

about everything else that might be in that water before you drink it (this is a purification

system, not a filtration system!)