

Why should I spend money on buying Beads?

When you compare the cost of a lost set of experiments or even a few contaminated tubes of reagents and factor in the additional time spent on refilling the water bath, cleaning the water bath, and other expenses such as racks and bottleneck weights that you have to buy to go along with it, the difference in price between owning a Bead Bath and a water bath clearly favors the Bead Bath. And because the dry metal Beads do not evaporate, and will not corrode the bath, and will protect the bath from burnout, a Bead Bath makes good financial sense. Finally, if you own a bath full of Lab Armor® Beads, you'll own the the most cutting-edge laboratory bath on the planet. So you're getting the latest technological advances, and a bath that protects you, your work, and your lab.

Can Lab Armor Beads be used to fill any constant temperature water bath?

Yes. Beads are fully compatible with nearly all non-circulating, non-shallow, standard depth (>5" deep) water baths. Lab Armor has evaluated the most popular, recent model water baths, including instruments from Fisher Scientific, Thermo, VWR, and Shel Lab.

What if my bath is designed differently than some of the more popular baths?

In some baths, you may notice an exposed thermocouple (thermostat) or heating element in the tub of your bath. An exposed thermocouple does not affect the performance of the Bead Bath. The exposed heating element is fine too, except for baths where the heating element is not centrally located. If your bath's heating element is off to one side, then your bead bath might have a noticeable temperature gradient from one side of the bath to the other. Some baths have cover plates at the bottom. If your bath is in good working condition, and you haven't noticed any thermal performance problems with water, then beads should work for you.

Can Beads be used to fill a circulating or shaking water bath?

In general, if a bath has moving parts that interface with water, don't add Beads. However, if the bath can be operated effectively without the moving parts, and you can turn the parts off or remove them, then beads may be used.

What do I need to know before I buy Beads?

A Bead Bath is designed to be easy to use. But if you're used to working with a water bath, you may have to make some adjustments.

A bead bath will perform the same functions as a water bath or an ice bath, ...

A Bead Bath performs all the essentials, including warming, thawing, incubating, chilling and does it while maintaining a constant temperature just like a water bath.

... but beads transfer heat more slowly than water.

Beads transfer energy more slowly than water. And depending on the size and starting temperature of the incubating vessel, a Bead Bath can take one and a half to two times longer to warm the vessel up. So when your protocol calls for warming, incubating, or thawing in the bath, plan a little extra time. Or you can dial in the bath by simply raising its temperature. For instance, if you are accustomed to performing 37 °C incubations and want to keep the same time interval, simply raise the bath temperature to 50 °C.