



How Much Alginate Do I Need for a Hand Cast?

A hand cast is a “bucket-mold” type of casting. By that we mean that the mixed alginate is placed into a container (bucket) and the hands are pushed down into the alginate to make the mold. The bucket is the structural support for the alginate during the molding and casting process.

The amount of mixed alginate you’re going to need is the volume of your bucket MINUS the “volume” of the hand(s).

1. Choose your bucket. It should be large enough to easily accommodate the hand(s) without the hand(s) touching the inside or bottom of the bucket. but not much bigger. If the bucket is bigger than it needs to be, it will require that you use more alginate than you need.
2. Fill your bucket with water. Have the model put their hand(s) into the bucket and let the extra water overflow into the sink.
3. Measure the **remaining** water with a measuring cup. A pint of water weighs almost exactly 1 pound, so a quart weighs 2 pounds and a gallon weighs 8 pounds. (While not exact, this approximation is close enough.)
4. Do the math and figure out how many pounds of water you need to fill your bucket. Divide the weight of the water by 4. That’s how much alginate powder you’ll need. If you’ve got 3 quarts of water (6 pounds) then you’ll need about 1 1/2 pounds of alginate.

NOTE: Since the alginate DOES increase the volume of the water a little bit, this formula makes about 10% more than you’ll need. You can reduce both the water and the alginate by 10% and you’ll probably be fine, but remember, there is always a little alginate that you can’t transfer from your mixing container to your molding bucket. Also, it is much better to mix a little more than you need than to mix too little.