# HOW TO SWELL A BARREL



Here are a few different methods we've seen used to swell a barrel prior to filling it.

Note: If you are not using a sanitation solution (citric acid, potassium metabisulfite, etc.) DO NOT leave water in your barrel for longer than 2 days without replacing.

#### STEAM METHOD

1. Using a steam generator or vent, fill the barrel with steam at approximately 212° Fahrenheit for 7-8 minutes or until you feel the hoops and staves are tight, and the barrel is properly swollen.

## HOT WATER METHOD

- 1. Fill the barrel with 1/10th its volume of the hottest water you have available, 175° -180° Fahrenheit being ideal (i.e.: 6 gallons for a 60 gallon barrel).
- 2. Insert the bung and lay the barrel on its side, slowly rotating it so the water comes into contact with all interior surfaces. Do this for at least 4 rotations.
- 3. Stand the barrel on its head and let it stand for 4-12 hours so that the head becomes completely hydrated. Flip the barrel onto the opposite head and let stand for an additional 4-12 hours.
- 5. Release the bung and allow the barrel to drain completely.

#### **COLD WATER METHOD 1**

- 1. Fill the barrel 1/3 full with cold water and let it stand for 3-4 hours.
- 2. Next, fill it to 2/3's full and let it stand for another 3-4 hours.
- 3. Finally, fill completely and keep it topped-up until the barrel stops seeping and seals.
- 4. Release the bung and allow the barrel to drain completely

## **COLD WATER METHOD 2**

- 1. Fill the barrel 1/3 full with cold water and let stand on one head for 12 hours.
- 2. Flip barrel onto its opposite head and let stand for an additional 12 hours.
- 3. Empty the barrel, rinse once with fresh water and allow barrel to drain completely.

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# PATCHING A LEAK

Swelling is an important process as it brings attention to defects in the barrel and ensures your painstakingly-crafted product doesn't end up on the floor. However, there are at times problem areas that need special attention. When you find a leak that isn't fixing itself, circle the problem area with chalk so you can find and monitor it later. Before attempting any of the below recommendations, drain and dry your barrel for best application.

#### **PRODUCTS**

- Barrel Sealant or Wax Melt directly with a blowtorch or heat in a stove top
  pot and drip into the problem area. Alternatively, you can try and work the
  wax into the problem area by hand. Sold online or at your local barrel
  brokerage.
- 2. **Paraffin Wax** This type of wax is usually stiffer and flakier than barrel wax so it's recommended you always heat this up for application. Sold online, grocery stores and craft stores.
- 3. **DIY Pastes** Can be made with a 1:4 ratio of distilled water and unbleached flour, the desired consistency being similar to a thick drywall paste. Once applied, using a blow torch or heat source, you can lightly go over the mixture to cure and seal it in place.

  Some brewers have reported that adding Calcium Carbonate/Chalk to the mixture in small amounts helped. Alternatively, creating a mixture of garlic and Calcium Carbonate/Chalk has also been reported as effective.
- 4. Aquarium or Food Service Caulk/Sealant Depending on what part of the world you live in, aquarium sealant may not be considered food grade, that's for you to find out. However, they are designed to not leach out any harmful chemicals into the water that could kill the fish or plant life inside. There are also many other sealants that are designated as food grade and used on dishwashers, walk-in coolers, and salad bars. Look for 100% silicone compounds. Sold online, Home Depot or most hardware stores.
- 5. **Blowtorch** Depending on the sugar content of the product stored in your barrel, we've heard you can apply a blowtorch to small leaks, caramelizing the sugars and sealing the defect. Sold online or at most hardware stores.

#### **LABOR**

- 1. **Force it** Use a mallet or hammer to tap leaky staves or shift the hoops to tighten the barrel.
- 2. **Golf tees/Toothpicks** Good for when you're needing some help around the croze or chime of the barrel. Push the wood into the leaky spot, aiming to break off the tee or toothpick in the hole to fill it. Excess wood can be sanded down so that it is flush with the barrel. <u>CAUTION</u>: If not done properly, this may cause the leaky point to become larger.
- 3. **Reed/Straw** Push reed/straw into the leak spots.