

- A 1 GALLON (3.8L) CARBOY FERMENTER
- **B** AIRLOCK
- **C** RUBBER STOPPER
- **D** RACKING CANE
- **E TRANSFER TUBING**
- F FUNNEL
- G YEAST(3)
- H SANITIZER (3)



## RECOMMENDED EQUIPMENT

- Large stock pot (1 gallon capacity or larger)
- Ten 12oz (or eight 16oz) flip-top bottles OR re-use pry-off bottles with our Capping Kit

## CIDER

At its most basic level hard cider is fermented apple juice. The provided yeast will create alcohol in the cider through fermentation. The yeast will consume the sugars in the apple juice and produce alcohol and CO2. With this kit you will be making a dry, sparkling cider.

## INGREDIENTS

#### JUICE

The base of your hard cider will be natural apple juice, which you will need to source. You will need a total of one gallon (3.8L) of juice that is without preservatives (Ascorbic Acid is okay, Potassium Sorbate or Sodium Benzoate are not okay and will prevent fermentation from happening) and is 100% natural. If you would like a more traditional cloudy hard cider then you can purchase unfiltered apple cider juice but if you would like a cleaner tasting, clear finished product then you will use apple juice.

#### YEAST

Yeast is a living organism that is technically a fungus. It grows and multiplies by eating the sugar in the juice, converting the sugar to alcohol and then releasing CO2 (yeast will eventually help to carbonate your cider).

## SANITATION

Proper sanitation is regarded as the most important step in making cider. Yeast is the only organism you want touching your cider, any other bacteria will eat the sugar and spread quickly making the cider sour and undrinkable. So make sure everything that touches your cider is properly sanitized before using. To sanitize, mix <u>HALF</u> of a packet of sanitizer with one gallon (3.8L) of tap water in a bucket or pitcher. Save the rest of the packet for bottling day. Next, sanitize all fermenting equipment (carboy, rubber stopper, airlock, funnel) by soaking for 60 seconds in the mix. No need to rinse. Let dry on fresh paper towels, though equipment doesn't need to be completely dry before you begin.

#### FERMENTATION

This is the process to make hard apple cider, if you would like to see some variations on this recipe turn to the last page before proceeding. This cider kit comes with enough sanitizer and yeast to make three batches so be sure to only use one packet of each per batch.

- 1. After you sanitize your equipment for fermentation you will add one gallon (3.8L) of apple juice directly to the carboy using the included funnel.
- 2. Next, add one packet of dry yeast to the juice in the carboy.
- 3. Take your sanitized rubber stopper and plug up the top. Now you need to make sure the yeast has oxygen to multiply so you will need to aerate the juice. Take your clean thumb and place it over the top of the rubber stopper hole. Shake the carboy vigorously for over a minute.
- 4. Take out your airlock and remove the cap. Fill it with water up to the "fill line," place the cap back on & gently insert into the rubber stopper. Gently place stopper into the carboy.
- Keep the carboy in a cool 60°-75°F (15°-23°C) dark place for 10 days to ferment. After 10 days your cider will be ready to bottle, just make sure airlock activity has stopped before bottling.

# BOTTLING

We recommend using flip-top bottles, the same ones that Grolsch® beer is bottled in. You can use empty Grolsch® bottles or try our flip-top bottling kit. You can even save pry-off bottles and use our Capping Kit to seal them. We suggest you practice the siphon technique, detailed below, with water once or twice before you bottle your cider. Having a friend to help bottle makes the job easier, too.

- 1. Rinse bottles with warm water to wash away any sediment or dust.
- Mix the remaining HALF of your sanitizer packet with a gallon (3.8L) of tap water. Soak your bottling equipment (bottles, caps, racking cane, tubing & a spoon) for 60 seconds to sanitize. No need to rinse. Let dry on fresh paper towels, though equipment doesn't need to be completely dry before you begin.
- 3. In a large stock pot, that can hold at least a gallon, add 1.5 cups (355 mL) water and exactly 2 Tablespoons (29 mL) of table sugar. This is called priming sugar. It gives the yeast fuel to carbonate your cider in bottles. Heat the water on medium-high heat and stir in the sugar until fully dissolved. Boil for 5 minutes. Cover & let completely cool.
- 4. Once the pot and sugar water are completely cool it is now time to siphon the cider from your carboy into the pot. This transfer helps leave sediment behind in the carboy. To start a siphon, get a bowl of fresh, clean water. Attach the tube clamp to one end of the tubing then submerge the tubing in the water to completely fill with liquid.

Next, close the clamp and attach the non-clamped end to the racking cane. Now you have a siphon starter. See illustrations to the right.

- 5. Be sure to place the carboy high up on a table or counter. Place the pot much lower than the carboy (on a chair or on the ground) - gravity and distance are important. Attach the black filter tip to the end of the racking cane. Remove the airlock and rubber stopper. Insert the cane into the carboy, making sure the end is far enough away from sediment so as not to suck it up. Hold the clamped end of the tube low to the ground over a glass or bowl and unclamp to drain the water & start the siphon. Clamp down once cider begins to flow out of the end.
- 6. Now hold the clamped end over your pot of priming sugar and unclamp to transfer the cider. Once transferred, mix gently to distribute the sugar.
- Now place the pot up high and the bottles as low as you can. Repeat steps 4-5 to siphon cider from the pot into bottles. Fill each bottle to where the neck starts, cap & repeat.
- 8. Store the bottles in a dark place with a temperature between 68°-75°F (20°-23°C) for 10 days to allow the cider to carbonate.
- After 10 days, move bottles to the fridge to lock in the carbonation. Leaving bottles at room temp beyond 10 days poses risks of over-carbonation or "bottle bombs." Enjoy within 6 months for optimal flavors.

# RECIPE VARIATIONS

<u>Apple Cinnamon Cider</u> - After 2 days of fermentation add 2 whole cinnamon sticks directly to the carboy, continue to ferment and bottle as usual.

<u>Apple Peach/Berry Cider</u> – If adding fruit to your cider, be sure to add less than a full gallon of juice to your carboy. Blend a few peaches or a few handfuls of berries until they become a thin puree, add water if necessary. Strain this mixture through a cheesecloth or fine mesh strainer. Boil for 5 minutes, let cool and add directly to the carboy. Top off with more apple juice as needed to reach the one gallon fill line. Proceed with fermentation and bottling as usual.

<u>Sweet Cider</u> - On bottling day, add 1-2 Tablespoons of Erythritol (non-fermentable sweetener) to each bottle before filling with primed cider. 1 Tbsp = semi sweet. 2 Tbsp = sweet.

WARNING: do not add real sugar, honey, fruit or other fermentable sugar to bottles, which will cause bottle bombs. Erythritol can not be fermented by yeast, making it safe for use. Erythritol is not a substitute for priming sugar.



#### STARTING A SIPHON:









