

Chemex Coffee Brewer Tip Sheet

The Chemistry of Coffee Brewing:

When brewing coffee, hot water acts as a solvent which washes the soluble solids out of the coffee grinds and into the brew. Brew methods that use paper filters have only the soluble solids in the cup. Brew methods like French press, espresso or turkish coffee have insoluble solids suspended in the liquid. Five main factors influence control brewing results. First is the ratio of water-to-coffee. Second is the particle size of the coffee: a finer grind means more surface area of the bean is exposed to the water. Third is the temperature of the water, ideally between 198-204°F, since water is a better solvent at near-boiling temperature. Fourth is contact time, how long the water and coffee are in contact with each other. Last is agitation; stirring the coffee-water infusion increases extraction rate of soluble solids. Knowing these simple theories might help you troubleshoot that next bitter, weak, or flat tasting cup.

Recommended Chemex Brewing Method

1. Open the Chemex-Bonded Coffee Filter into a cone. One side will have 2 layers, the other side 1. Place the cone into your Chemex with the doubled side against the pouring spout. The extra layer of paper will help the filter not sink into the groove of the pour spout. You may use non-Chemex brand filters that are a true cone shape and come to a point, but they may break or fall through into your brewed coffee. Chemex filters are specifically designed to perform best with the brewer; there are no other filters quite like Chemex filters. Using hot water, wet the paper filter. The Chemex filter sticks to the glass so you can invert it and pour off the water.
2. Using a medium grind, add one coffee measure (about 8 grams by weight) of coffee per 5 oz cup. The Specialty Coffee Association of America recommends an 18:1 ratio. If possible, weigh the dose of coffee. Since every coffee has a different density, measuring ground coffee by volume can be inaccurate. On the proper grind: If the water stalls completely in the grounds - your grind is too fine. If it pours through too fast, and the resulting coffee is weak - then the grind is too coarse. Adjust to your preference!
3. After the water reaches a boil, remove from the heat for 30 seconds. It should now be between 195 to 205°F. Chemex recommends pouring a small amount of water over the ground coffee, just enough to wet the grounds. Pre-wetting allows the coffee to "bloom", which is when the coffee lets off some gases. The bloom can ensure that all the grounds are uniformly wet and helps to prepare for even extraction.
4. If you are blooming your grounds, allow the water to drain for several seconds (at least 10, up to 45). You can then make your first substantial pour. Simply pour water slowly in a circular motion, staying toward the center of your brew bed. Take care to only pour directly onto your coffee, and avoid pouring down the side of the filter. If you're pouring on to the side of the Chemex, the water can bypass the coffee entirely and end up going straight into the brewed coffee, watering it down. Once the desired amount of coffee is brewed, dispose of the spent grounds and filter (great for the compost or vermiculture!). Replace the filter with a Chemex Glass Lid or Able Heat Lid for Chemex to keep the coffee hot, if you'd like.

Further Tips

- Chemex brewing works best for brewing larger amounts of coffee. Paper taste and heat loss are more noticeable when trying to brew a small batch of say 12 oz.
- I don't recommend applying heat to keep the coffee hot. Better to have a lukewarm cup with good flavor than a hot cup with stinky flavor because it's on a burner too long. If you do use an electric burner, use a Chemex Wire Grid.