



“Amber beer” is a catchall term that refers to any medium-opacity beer, ranging from bright red to caramel brown in color. Image Credit: Unsplash user Julia Nastogadka

I used to believe that all amber beer looked about the same: a bold, almost cranberry-colored brew with a hint of frothy, cloudy opacity. Everything changed for me when I went to my first amber beer tasting. I saw a long tasting table lined from end-to-end in every amber style imaginable, from the bright red ale that I was used to seeing, to the deep caramelized browns of American amber ale. It was clear that the brewers were proud of their glasses — each ale had an [unmistakable color](#) unlike any other sitting next to it. When I looked closely at each glass, side-by-side, I could see the subtle differences between them. I saw flecks of gold in one light red beer, whereas its neighbor had deeper, almost rose-like color qualities.

These subtle differences in [color and opacity](#) make your brew absolutely unique. That’s why it’s important to measure your amber beer’s opacity and color consistency throughout the brewing process. When it comes to red or amber ale, your color is your signature, and it will keep your customers coming back year after year.



Brewers often find it difficult to measure their amber beer's color by eye, since this beer style has a wide range of possible color variations. Image Credit: Pixabay CC user PeterKraayvanger

You Have Freedom of Choice

Beer experts still aren't sure [how to categorize](#) amber ales and other medium-roast beers. Some experts think that any dark ale with prominent hops should be called "amber," while others think that the [medium-roast malt](#) defines this beer style. The only factor that experts can agree on is the Standard Reference Method (SRM) color category for amber beer. This style sits anywhere from 9.0 SRM to as much as [14.0 SRM](#), meaning that the beer ranges from rich, golden amber to ruddy, reddish brown.

Generally, as long as your beer has the basic qualities of most amber ales, such as bold hops balanced with caramel-like malt, and a color within that SRM range above, you can safely call your beer an "amber." Yet this freedom causes an obvious problem for breweries: how do you know when you've reached an [ideal opacity and SRM range](#)? In this case, consistency across brews is more important than the specific color or opacity that you choose for your beer. Unlike other well-defined beer styles, like stout or porter, you'll never know when your amber beer reaches its perfect "amberness," but you will know whether your beer's color and opacity match the last batch that you made. As I mentioned earlier, color and turbidity are the defining signatures of breweries who make amber beer, so it's important to fully embrace whatever color and opacity you choose.

Measuring Opacity and Color Quality Can Be Tough

Once you've landed on a color and turbidity that look most appealing to you (whether that's a clear, juice-colored red ale or a foamy, cloudy brown ale), you'll need to test the color and turbidity for every future brew that you make to ensure consistency. This isn't something that you can do by eye. When I went to the amber beer tasting, it took a few minutes for my eyes to pick out subtle differences in color and opacity between each glass, and hours later, I still found new hues that I'd never noticed before around the edges of the glass.

What's more, you might forget the exact details of what your ideal brew looks like, resulting in uneven, inconsistent batches over time. Without a consistent signature color and turbidity, it's difficult to maintain a loyal customer base, and critics might even give your beer a [lower score than it deserves](#). Seemingly small inconsistencies in the brewing process can dramatically alter the look of your amber beer, and even changes in the weather (like [added humidity](#)) will impact your final result. You don't want to discover this problem after your beer is already in the bottle. Few things are worse than opening up a beer case, only to find that half the bottles are light, rosy red, and the other half are two shades darker.



It's easier to see shades of red, brown and gold when you use a spectrophotometer for color quality control. Image Credit: Flickr user Michael Fajardo

The Best Spectrophotometer for Your Amber Beer

To solve this problem, you'll need a spectrophotometer that's capable of measuring both color and turbidity, especially in shades of brown and red. These two colors are difficult to distinguish by the naked eye, yet a high-quality spectrophotometer can instantly catch the subtle differences between these shades. Once you make your first amber brew that looks and feels like your idea of the perfect beer, you can measure its exact color and opacity with a spectrophotometer, then use those numbers as a basis for all of your future brews. In this sense, you create your *own* definition of amber beer. This style is no longer confusing and undefined. For you, "amber beer" means, for instance, a beer with 10.0 SRM and 0.5 Formazin Turbidity Units (FTU).

In order to effectively measure a beer that's capable of being either opaque or nearly clear, you'll need a spectrophotometer that can handle [either type of liquid](#). The [Vista](#) or [UltraScan VIS](#) will be your best options because they can measure transmission haze for a wide range of liquids, from clear, apple juice-like beer to thicker, orange-juice like ales. This instrument also measures transmitted color, allowing you to get exact readings on the precise shade of red that you want for

your brew. Having all of these features on a single instrument not only saves you time and maintenance costs, it also assures you that any measurement differences are the result of a variation in the product itself, not in the instrument's readings. You can single out any small inconsistencies before you bottle your amber beer, allowing you to attain a consistent, signature color that will define your beer forever.

To measure your own amber brew, [contact our expert staff](#) at HunterLab. Our distributors can suggest which spectrophotometers will work best for the type of beer that you want to make, ensuring that you'll produce a product that will make you proud.