



Consistent color is a sign of a high-quality product, which is why color measurement tools are essential for glass cleaner manufacturers. Image Source: Pixabay user PublicDomainPictures

Making glass cleaner seems like a simple process at first; all you need is ammonia, a soapy cleaning agent, rubbing alcohol, and water. But when you're making [cleaning products](#) on a commercial level, this process becomes much more complex. If you mix the wrong balance of these ingredients or use subpar, impure products, your glass cleaner might leave streaks on your customers' windows. Moreover, inconsistent products that vary too much in color between batches could scare away prospective customers who worry about the safety and quality of the cleaner. Spectrophotometric color measurement is the key to ensuring quality in your ingredients and earning your customers' trust. By testing your products for accurate, consistent coloration, you can bolster and protect your company's reputation, leading to better sales and more satisfied customers.

Why Blue is the Unofficial Industry Standard

When you walk through the cleaning section of any grocery store, the glass cleaners are pretty easy to spot: most of them are light blue. However, the main ingredients in glass cleaners (isopropanolamine and ammonia) are completely clear.¹ This means that the blue color doesn't originate from the primary active ingredients themselves, but from light blue dyes added for aesthetic purposes.

The reason most glass cleaners on the market are blue is that, during the 1960s, Windex's original recipe used a translucent blue dye to help it stand out from the pack. In response to this product's popularity, many customers began associating the color of light blue spray with glass cleaners.² Today, many glass cleaner manufacturers still use light blue dye to attract their customers and more easily gain their trust.



Most glass cleaners on the market are blue in color, however, you can choose any color you would like when you make your cleaning products. Image Source: Pixabay user congerdesign

Deciding on Your Ideal Product Color

Depending on your ideal customer, you might choose to maintain this unofficial industry standard, or break the mold with different colors (or no color whatsoever). Before you make your decision, consider that light blue dye has more potential uses in glass cleaner than just aesthetics and good marketing—it can also be safer to use in some households. Cleaning products that are clear in color are more likely to be mistaken for water or other types of products, and unless these bottles are clearly marked, it's easier for customers to mix them up with other cleaning agents.³ By following industry norms and making your products blue in color, you could target customers who are more comfortable using familiar-looking products or those who have young children. You also make it easier for your customers to see how much product they've applied to the glass since bright colors show up more clearly against a transparent background.

However, you can also use color measurement tools to create [an entirely new color](#) for your product or perfect your ingredients in their purest form. Although many customers still prefer the traditional blue color, a growing number of consumers are turning away from products with artificial dyes toward more natural products free from impurities and synthetic ingredients. In these cases, clarity and colorlessness become prized. If you're targeting this audience, haze measurement combined with transmission color measurement will become particularly critical in order to ensure optimal aesthetic appeal. This process will be similar to how [bottled water manufacturers](#) test samples for purity.



You can use a spectrophotometer to choose the perfect blue hue for your cleaning products. Image Source: Flickr user Your Best Digs

Color Measurement Consistency Means Higher Quality Ingredients

Because glass cleaner is a translucent product and will be applied to a clear surface that shows every tiny imperfection, you'll want to focus on both haze and color measurement during your production process. The HunterLab [Vista](#) is capable of measuring both haze and transmitted color at the same time, in a single measurement. This is a rare feature; most spectrophotometers can only measure one of these factors at a time, whereas the Vista is capable of handling both simultaneously, optimizing accuracy and efficiency.

To [get the most out of the Vista](#), you'll need to measure the haze and color of your ingredients first. A cloudy or off-color sample of rubbing alcohol, for example, will impact the appearance of your final product later and could even be the sign of a contaminated ingredient. By testing whether all of your ingredients are clear and accurately colored in advance, you will significantly improve the appearance and performance of your finished glass cleaner.

After you've assured that your ingredients are as clear as possible, you'll need to test the final mix of your product, both before you add your dyes and after. If your product is completely clear and pure before you add your dye but becomes hazier after you add the color, you might consider using a different dye that doesn't cause your product to appear cloudy. From here, you can use your [Vista spectrophotometer](#) to find the ideal shade of blue (or any other color you'd like) and create a baseline color measurement for the rest of your products to follow. Spectrophotometric color measurement is essential for recipe creation and for maintaining consistency in your products year-after-year, ensuring that each of your bottles looks exactly the same.

The HunterLab Solution

For more than 60 years, HunterLab has been a leader in the color measurement industry. Today, we offer [a versatile range of instruments](#) designed to fit any company's needs. Our user-friendly tools are capable of measuring color with the highest degree of accuracy possible, ensuring that each product released is an ideal reflection of the company's color standards. With the Vista, you can accurately measure the color and haze of your glass cleaning products without having to juggle multiple color measurement instruments or take multiple measurements, minimizing sample prep time and cost. [Contact us](#) to learn more about our Vista spectrophotometer or any other color measurement tools that could help your cleaning company grow.

1. "Simple Cleaners for Streak-Free Windows and Mirrors", February 24, 2016, <https://www.onegoodthingbyjillee.com/2016/02/2-simple-cleaners-for-streak-free-windows-mirrors.html>
2. "What Chemicals Are in Windex?", <https://www.hunker.com/12155369/what-chemicals-are-in-windex>
3. "Nontoxic Cleaning Products Proliferate", February 10, 2010, <http://www.nytimes.com/2010/02/11/garden/11clean.html>