



Dish soap color has little to no effect on its cleaning power but can have a big impact on consumer perception. Image Source: Pexels user Burst

Why does liquid dish soap have a color? After all, the essential ingredients of liquid dish soap are water, cleaning and foaming agents, antibacterials, stabilizers, and agents that control thickness and clarity.¹ None of these are naturally colored candle apple green, blue raspberry, or lemon, nor do any of their mixtures result in these bright, final colors. To achieve these colors, manufacturers must mix in dyes during the blending process. So why go to the extra trouble, spending extra time and money procuring, assessing, and admixing dyes? For the same reason that perfumes are included: customer perception.



Many customers will seek out a liquid dish soap by color. Image Source: Pexels user Pixabay

Color Impacts Consumer Perception

Dyes have no effect on the cleanliness of the dishes. Yellow dish soap works precisely as well as blue, green, or orange dish soap. Yet, customers will prefer one color of soap to another and will purchase their chosen color preferentially when the time comes to replenish their supply. Most customers intuitively understand that yellow soap does not clean better than blue soap; their preference is not, then, based on assumptions of relative efficacy. Rather, it is the color itself that they like. Perhaps it is the color of soap they grew up with, perhaps it matches the color scheme in the kitchen, perhaps it corresponds to the scent they like, perhaps it is their favorite of all colors. Whatever the reason, dish soap color can be a significant factor in purchasing decisions.

Not only do customers choose dish soap partially in response to an emotional reaction to color, color can also inspire loyalty in a brand. Rather than making a new choice each time customers return to the store to resupply, we shop to a significant degree based on habit. If “the blue one” worked well last time, they’re likely to choose “the blue one” again. In this way, customers begin to recognize and [associate brand with color](#) and color becomes an important aspect of a brand’s identity. Even if competing liquid dish soap manufacturers have a similar color complement, small differences in shade and hue can be enough to distinguish the products. These differences work best in combination with bottle shape and size and label text and images to create a cohesive aesthetic and promote both brand recognition and loyalty. The importance of color in liquid dish soap requires manufacturers to implement a strict regimen of color quality control.



Spectrophotometers are vital to ensure accurate and consistent dish soap color. Image Source: Unsplash user Markus Spiske

Spectrophotometers Ensure Brand Consistency

The ideal method of liquid dish soap color quality control relies on spectrophotometric color measurement. Transmission spectrophotometers measure the exact color of translucent or transparent liquid objects, perfect for translucent liquid dish soap. Reflectance spectrophotometers measure the color of opaque liquids or solids and would be necessary for companies manufacturing opaque liquid dish soap. Certain advanced spectrophotometers, such as the [UltraScan Pro from HunterLab](#), are capable of measuring both transmittance and reflectance color.

Whether measuring translucent or opaque liquid soaps, spectrophotometers are an [essential quality control tool](#). Unlike human observers, who see color subjectively, spectrophotometers measure color on an objective, numerical basis. This means that spectrophotometers will always measure color to your exact standards. While the observations of human color testers may vary due to biological and environmental factors, those of spectrophotometers will remain precise over tens of thousands of measurements.

Not only can spectrophotometers be useful during the mixing process to ensure that each batch of dish soap is the proper color before moving to the next stage of production, they can also be helpful in the realm of market research and color development. By spectrophotometrically recording the exact shades that customers prefer in focus groups and other studies of color preference, these instruments allow manufacturers to easily replicate the shade that customers respond to best. These recordings can be used as future standards as manufacturers continually search for the perfect dish soap color.

The HunterLab Difference

At HunterLab, we've been developing [color measurement solutions](#) for over six decades. Our reputation for quality has led top companies to choose HunterLab to perfect their product development and manufacturing processes. Because we work closely with our customers to understand their unique needs, we're able to offer instruments ideally suited for liquid dish soap quality control. [Contact us](#) to learn more about our products and lets us help you find the perfect tools for your needs.

1. "Palmolive Ingredients," 2017 <http://www.palmolive.com/ingredients>