The color of mouthwash has nothing to do with its efficacy. It is not the byproduct of any medicinal ingredients or flavors, nor do mouthwashes of different colors vary in substance. So why do mouthwash manufacturers bother adding coloration to their recipes? Branding.



What color does your mouth smell like? Image Credit: Flickr User danjo paluska (CC BY 2.0)

## **Color Is Inextricable From Brand for Mouthwash Companies**

The bright blues, greens, yellow, and purples of various mouthwashes are intended to differentiate similar products in the eyes of consumers. While they may have the same active ingredients, differently colored mouthwashes look like separate products. The colors of mouthwash brands are also linked to unique flavors and scents. This affects customer choice in a number of ways.

For new customers, bold, eye-catching colors attract attention and lend an impression of potency. Particularly strong colors can be linked unconsciously with strong effects. Also, most people have preferences for certain colors (I happen to like yellow and green). Without more compelling reasons to prefer a particular brand, customers may simply pick the color they like the best. Once they've picked this color, unless the product is unsatisfactory for some reason—which is doubtful, as one is much the same the other—they're likely to pick the same color the next time. This preference will be reinforced by any perceived or actual differences in flavor or scent.



Customers develop loyalties towards particular mouthwash colors. Image Credit: Flickr User the **impulsivebuy** (CC BY 2.0)

## **Quality Control Processes Assure Mouthwash Brand Consistency**

This effect is lost if manufacturers alter the color of their products, or if their colors lack consistency from batch to batch. For these reasons, manufacturers employ stringent color quality control procedures at their production facilities. Samples of each batch, or enough batches to generate statistical reliability, are measured in test labs before the mouthwash is bottled. Measurement is done at this stage to prevent any extra loss of revenue in bottling materials, bottling machine energy, or delivery costs. Any variation detected at the test lab stage can be corrected by mixing in additional colorants while the mouthwash is still in the vat.

For this purpose, most manufacturers have long since jettisoned human observers. Even when comparing mouthwash samples to established standards, human observers are subjective in their analysis of color. Different observers can see different colors. Also, the same observer can see different colors based on lighting, sample size, and even mood. Given the large volumes of mouthwash produced, this subjectivity can result in inconsistent coloration, perhaps even in bottles sitting next to each other on the shelf. As color is such an important factor in consumer choice, this inconsistency could not be allowed to persist.



Color consistency is important when producing large volumes of mouthwash. Image Credit: Flickr User <u>Jae-sun Gim</u> (CC BY 2.0)

## Transmission Spectrophotometers Offer Reliable, Objective Color Analysis

As a result, manufacturers have turned to spectrophotometers, objective color analysis instruments, to measure their mouthwash. These instruments report color results numerically, and their results are precise. This prevents any inconsistently colored batches from leaving the vat. Not every spectrophotometer measures color in the same way, which is why you should use a transmission spectrophotometer to accurately measures transparent liquids like mouthwash.

With over six decades of experience developing spectrophotometers for transparent liquids, HunterLab has engineered a series of solutions ideal for the mouthwash industry. For companies that only manufacture transparent liquids, like mouthwash, and wish to save space in their laboratory the <u>Vista color and haze transmission spectrophotometer</u> is a sound color measurement solution. Much smaller than earlier spectrophotometers, and more affordable, Vista is a top-of-theline solution for transmission color analysis. For companies testing the color of mouthwash and other opaque liquids or solids, <u>the UltraScan series of spectrophotometers</u> is capable of reflectance and transmittance measurement. While larger than Vista, UltraScan spectrophotometers eliminate the need for a separate instrument to test the color quality of the company's opaque products. To learn more about which instrument would be ideal for your production process, <u>contact our friendly</u>, <u>professional sales force today</u>.