



Hand sanitizer is designed to eliminate dangerous microbes to protect health and safety. Image Credit: Pexels user Pixabay

“Not that one, Mom,” said Ted. “I don’t want that one. I’m not putting it on my hands. Buy this one.” Eva sighed. Had she been this picky as a kid? Was this what her mother had meant when she’d said that Eva would understand someday? “There’s nothing wrong with it, Ted,” she said. “What reason could you possibly have for not liking this hand sanitizer? They’re the same.” Ted took a deep breath. He was trying as hard as he could to be patient. Why didn’t his Mom get it? “That one was yellow last time,” he said. “It’s not supposed to be yellow. There’s something wrong with it. I don’t want to put it on my hands.” Eva looked at her watch. Ted’s little sister would be done with dance in 12 minutes. This wasn’t the time to be arguing in Walgreens. “Okay,” she said. “Fine. We’ll get the other one. Let’s go.”

Color consistency is an important facet of quality control for manufacturers of hand sanitizer. While a customer may not be aware that they are looking for a particular color of sanitizer, they are likely to notice if the product is not the color they expect it to be, compromising saleability and damaging brand reputation. As such, color measurement is an integral part of product quality control, helping manufacturers ensure their product meets customer expectations.



Sanitizer dispensers have become ubiquitous over the past few decades as use in both personal and professional settings has expanded. Image Credit: Flickr User エンバルドマン (CC BY 2.0)

Instrumental Color Quality Control Ensures Consistency

To ensure consistently colored sanitizer from batch to batch, manufacturers turn to instrumental color measurement. Instruments are able to objectively determine the color of a product, with a much higher degree of repeatability than human observers. Manufacturers input their desired color or a range of acceptable shades. The instrument rapidly assesses the color of the sample, and [compares it against the pre-determined standard](#). Rapid and accurate, this measurement guarantees that any off-color batches will be detected in time for manufacturers to take corrective action. Should repeated batches fail to meet tolerance standards, it can alert manufacturers that there is a problem with their process.

For measuring transparent liquid or gel products like hand sanitizer, [the transmission spectrophotometer is the preferred instrument](#). These instruments measure the changes in the color of light that passes through an object. Built for industry use, they are durable, dependable, and long-lasting.



Finding the right spectrophotometer is essential to ensuring your products are of the highest quality and adheres to industry standards. Image Source: Unsplash user Tiko Giorgadze

Clarity Control Essential for Customers and FDA Regulators

Certain spectrophotometers, such as HunterLab's Vista, are also capable of measuring the clarity or opalescence of liquids in addition to measuring the color. A cloudy sanitizer can cause customer concern in the same way as an off-color product. Also, clarity is an aspect of drug quality control regulated by the FDA.¹ Hand sanitizer, of course, qualifies as a drug and falls under this regulation.² Should the administration find a manufacturer is not in compliance with their published regulations, they have the power to issue written warnings, impose fines, and even halt production. Even the written warnings can be serious, and potentially cause hand sanitizer manufacturers to lose customers. In short, failure to implement and record [sound quality control processes](#) can seriously impact a manufacturer's bottom line.

HunterLab Quality

With over six decades of experience helping manufacturers meet quality control standards, HunterLab has expertise in every aspect of color measurement instrumentation. Today, we offer a comprehensive range of [portable, benchtop, and in-line spectrophotometers](#) to ensure our customers are able to implement the highest level of quality control at every stage of the R&D and manufacturing processes. Combined with our customizable color measurement software, our products offer unprecedented insight into color behavior and allow you to create, refine, and continuously evaluate formulations. [Contact us](#) to learn more about the HunterLab Vista or any of our other spectrophotometers and let us help you select the perfect instrument for your purposes.

1. "Code of Federal Regulations Title 21", April 1, 2017,
<https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=211>
2. "ISSA's Guide to the Regulation of Antibacterial Hand Soaps",
https://www.issa.com/data/moxiestorage/regulatory_education/regulatory-reference-library/antibacterial-handssoap.pdf