

The effectiveness of mouthwashes often relies on synergistic effects between ingredients. The chemistry of mouthwashes is carefully balanced to ensure efficacy, safety, and palatability for daily use in oral hygiene routines. For example, a compound formula mouthwash containing chlorine dioxide, cetylpyridinium chloride, and zinc ions can provide long-lasting inhibition of bad breath with fewer side effects<sup>2</sup>. Chlorine dioxide mouthwashes have shown significant reductions in bad breath and levels of sulfur compounds even after 12 hours of use<sup>4</sup>. They work by oxidizing VSCs and providing oxygen to .anaerobic bacteria, which are often responsible for oral malodor<sup>6</sup>