

## **Kemin Human Nutrition and Health Introduces XCS-11® Clinically Proven Ingredients to Improve Oral Health**

**Oral care ingredient neutralizes bad breath at the root cause and promotes a healthy mouth**

**DES MOINES, Iowa, U.S. (March 29, 2023)** – Kemin Industries, a global ingredient manufacturer that strives to sustainably transform the quality of life every day for 80 percent of the world with its products and services, recently added the XCS-11® product line of oral health ingredients to the Kemin Human Nutrition and Health portfolio. XCS-11 was previously produced and sold by Bio-Cide International, which Kemin acquired in 2021. Kemin Human Nutrition and Health has now integrated XCS-11 into the business unit's collection of whole-body solutions.

When used in formulations for consumer oral health products, XCS-11 can deliver a variety of benefits. The ingredient promotes oral health and hygiene and is a fast-acting remedy for bad breath, delivering a clean-mouth feeling and fresh breath.

"We are pleased to introduce XCS-11, our line of gentle, yet effective, solutions that promotes oral health and hygiene and refreshes bad breath," said Chris Sadewasser, Global Product Manager, Kemin Human Nutrition and Health. "Our oral care ingredients provide quick, long-lasting effects by targeting the odorous volatile sulfur compounds that cause bad breath."

XCS-11 is clinically validated to neutralize—not mask—bad breath caused by volatile sulfur compounds (VSCs). Unlike other ingredients that target oral health, XCS-11 selectively targets the root cause of bad breath, helping promote oral hygiene without a burning sensation or discoloration/staining of teeth.

"Bad breath is a major concern for many people, and about 90% of odors in the mouth are derived from the oral cavity, including the back of the tongue," said Sadewasser. "Tongue coating is a significant source of VSCs. XCS-11 directly reacts with VSCs to create non-odor-causing compounds, supporting a healthy oral environment and giving users a fresh, long-lasting, clean-mouth feeling."

In clinical studies, XCS-11 was shown to improve oral malodor scores and reduce the concentration of VSCs after one rinse—and hold off bad breath for over four hours, compared to a placebo.<sup>1</sup> Other positive oral health indicators, such as reduced plaque and tongue coating index, were also seen after two weeks of use.<sup>2</sup>

"A healthy body starts with a healthy mouth, and studies suggest that poor dental hygiene is linked to a number of health concerns," said Sadewasser. "XCS-11 has been shown to support a healthy mouth, providing long-lasting oral hygiene benefits through a selective mode of action. By targeting oral health, we continue Kemin's mission to promote better health and wellness."

According to Mintel's "US Oral Health Market Report 2022", the oral care category of the health and wellness market has seen steady growth, with U.S. retail sales of oral health products increasing 21% from 2017 to 2022.<sup>3</sup> The COVID-19 pandemic also had a reported impact on sales for oral health products, with a reported 6.3% increase in sales from 2020 to 2021.<sup>1</sup> Kemin Human Nutrition and Health sees oral care as a growing market in overall health and wellness, making it a great fit for the business unit's portfolio of ingredients.

The XCS-11 line of proprietary, aqueous sodium chlorite solutions delivers safe, targeted release of chlorine dioxide for superior oral hygiene and is available in two concentrations: XCS-11, which can release 2% chlorine dioxide, and XCS-11® Pro, which can release 5% chlorine dioxide. XCS-11 is typically diluted to a low target concentration and has a low inclusion level in finished formulas.

XCS-11 is a cost-effective solution that manufacturers can easily add flavor to and formulate for applications in oral care products, including mouthwash and toothpaste. XCS-11 offers many labelling benefits, including non-GMO, Kosher, Halal and vegan, and XCS-11 is not tested on animals.

For more information on how XCS-11 sets oral health products apart from the competition with a fresh, long-lasting, clean-mouth feeling, [click here](#).

###

### **About Kemin Industries**

**Kemin Industries** ([www.kemin.com](http://www.kemin.com)) is a global ingredient manufacturer that strives to sustainably transform the quality of life every day for 80 percent of the world with its products and services. The company supplies over 500 specialty ingredients for human and animal health and nutrition, pet food, aquaculture, nutraceutical,

food technologies, crop technologies, textile, biofuel and animal vaccine industries.

For over half a century, Kemin has been dedicated to using applied science to address industry challenges and offer product solutions to customers in more than 120 countries. Kemin provides ingredients to feed a growing population with its commitment to the quality, safety and efficacy of food, feed and health-related products.

Established in 1961, Kemin is a privately held, family-owned-and-operated company with more than 3,000 global employees and operations in 90 countries, including manufacturing facilities in Belgium, Brazil, China, Egypt, India, Italy, San Marino, Singapore, South Africa and the United States.

For further information: Carrie Livingston, Director of Media Relations | [carrie@colinkurtis.com](mailto:carrie@colinkurtis.com), +1 815 519 8302

#### *REFERENCES:*

<sup>1</sup>Shinada, K., Ueno, M., Konishi, C. et al. A randomized double blind crossover placebo-controlled clinical trial to assess the effects of a mouthwash containing chlorine dioxide on oral malodor. *Trials* 9, 71 (2008).

<https://doi.org/10.1186/1745-6215-9-71>

<sup>2</sup>Pham, T., & Nguyen, N. (2018). Efficacy of chlorine dioxide mouthwash in reducing oral malodor: A 2-week randomized, double-blind, crossover study. *Clinical and experimental dental research*, 4(5), 206–215.

<https://doi.org/10.1002/cre2.131>

<sup>3</sup>White Boehm, Jennifer. (2022). *US Oral Health Market Report 2022*. Retrieved from Mintel.

---

<https://news.kemin.com/press-releases?item=122651>