

FRESH GUARD™

BY Efferdent™



The patented Fresh Guard™ **Soak** composition provides for highly effective disinfecting and removing biofilm from dental appliances. The product removes greater than 99.9% of odor causing bacteria.

To validate the cleaning action of new Fresh Guard™ by Efferdent™, Prestige Brands, Inc. conducted dedicated laboratory studies of the product’s ability to eliminate relevant odor-causing bacteria from oral appliances.

Anti-microbial performance

Three microorganisms found in the human mouth – *fusobacterium polymorphum*, *klebsiella pneumonia*, and *veillonella atypica* – were chosen for this investigation based on their propensity to emit the foul-smelling volatile sulfur compounds generally accepted as the primary cause of halitosis (bad breath)^{1,2}. Furthermore, unlike many other oral bacteria, these organisms have been shown to adhere to removable appliances^{3,4}.

The results of the study are summarized below:

Table 1: Reduction in relevant bacteria after introduction of Fresh Guard™

Organism	Colony count at T=0	Log ₁₀ reduction at T=5 minutes	Percent reduction at T=5 minutes
<i>Fusobacterium polymorphum</i>	2.3 x 10 ⁷	>6.36	>99.9999
<i>Klebsiella pneumonia</i>	1.1 x 10 ⁶	>5.00	>99.999
<i>Veillonella atypica</i>	6.2 x 10 ⁵	>4.79	>99.99

¹ Solis-Gaffar MC., Fischer TJ. and Gaffar A. *Instrumental evaluation of odor produced by specific oral microorganisms*. J. Soc. Cosmet. Chem. 30:241-7, 1979.

² Goldberg S., Cardash H., Browning H., Sahly H., and Rosenberg M. *Isolation of Enterobacteriaceae from the Mouth and Potential Association with Malodor*. J. Dent. Res. 76(11):1770-1775, 1997.

³ Gusberti F., Gada N., Lang N., Geering A., *Cultivable microflora of plaque from full denture bases and adjacent palatal mucosa*. J. Biol. Buccale 13:227-236, 1985.

⁴ Theilade E., Budtz-Jørgensen E., Theilade J., *Predominant cultivable microflora of plaque on removable dentures in patients with healthy oral mucosa*, Arch Oral Biol, 28(8):675-680