

Product Specification : Cosmetic Product 003

(ผลิตภัณฑ์เครื่องสำอาง)

Name : **Mouth Spray (for bad breath and refreshment)**

(สเปรย์ระงับกลิ่นปาก)

Thai FDA Registration No. : 50-1-5901629**Active Compositions** : Containing natural products of Thai medicinal plants extracts including Turmeric/ ขมิ้น (*Curcuma longa*), Guava/ ฝรั่ง (*Psidium guajava*) and Kot-Pung-Pla/ โกรฐพุงปลา (*Terminalia chebula* gall) in ethanol solution**Characteristics :**

- Physical appearance : yellowish clear solution
- pH : 5
- Odor : Characteristic herbal odor
- Particle size and zeta potential : None

Standardization : HPLC fingerprint by using curcumin and gallic as a marker**Biological activities :**

- Anti-inflammation activities by the inhibiting of nitroxide release of $54.41 \pm 4.59\%$ at 5 mg/ml in comparing to the standard triamcinolone acetonide of $42.59 \pm 2.28\%$
- Anti-inflammation activities by the inhibiting of denaturation of albumin from egg white of 27.93 ± 6.61 mg/ml. The activity of Diclofenac standard was 1.54 ± 0.02 mg/ml.
- Anti-inflammation activity in EPP (ethyl phenyl propiolate) induced ear edema of Wistar rats of $47.90 \pm 14.84\%$ at 30 minutes, while the standard anti-inflammatory product, diclofenac gel (1%) gave $56.57 \pm 12.20\%$
- Anti-bacterial activities of the product at 9600 μg by the inhibition of *S.aureus* and *S.mutans* of 10.00 ± 1.00 mm and 11.30 ± 0.60 mm, respectively, while the standard erythromycin at 15 μg gave 16.70 ± 1.20 mm.

Clinical Performance : Satisfaction of human volunteers on the product characteristics**Microbial Contamination** : None

Safety Evaluation :

- No toxicity on gingival fibroblasts with more than 70% cell viability at 1 mg/ml
- No skin irritation in human volunteers by the closed patch test

Stability : Chemical and physical stability

Shelf life at 30 °C : 5 years

Indication and use : Spray in mouth and throat for fresh breath and anti-inflammation

Packaging and Storage : 25 ml in a bottle with sprayer/ keep in dry and cool place
protected from light

Precaution : - For external use only
- Avoid from inhalation and getting into eyes
- Rinse off and stop using when there is any undesirable effects