

Specification : Volatile oil loaded nanovesicular suspension /

สารแขวนตะกอนน้ำมันหอมระเหยเก็บกักในอนุภาคขนาดนาโน

(Manose RM-0031)

(Application : An active ingredient for anti-acne cosmetics and anti-cancer

food supplements / สารสำคัญในผลิตภัณฑ์เครื่องสำอางรักษาสิว

และผลิตภัณฑ์เสริมอาหารต้านมะเร็ง)

1. Name of the raw material : Volatile oil loaded in nanovesicular suspension
2. Active components : Volatile oil such as holy basil oil 0.5% (eugenol)<sup>(1)</sup>, etc.
3. Common and scientific name/  
Family of the plant : Containing holy basil (*Ocimum sanctum* L.) oil/  
LABIATAE etc.
4. Physical appearance : Turbid light yellowish suspension with specific herbal odor
5. pH : 5
6. Standardization : HPLC fingerprint using eugenol as a marker
7. Solubility : Soluble in ethanol

- 
8. Microbial contamination : No pathogenic microorganism with less than 1,000 cfu/g of the total plate count of bacteria, yeast and fungi which is conformed to the Thai FDA regulation
9. Biological activities : Anti-bacterial<sup>(2)</sup>, anti-oxidant<sup>(3)</sup> and anti-cancer<sup>(4)</sup>
10. Animal / human performance test : Anti-cancer in animals<sup>(4)</sup> and anti-bacterial (*Propionibacterium acne*) in human volunteers<sup>(5)</sup>
11. Safety : No skin irritation in human volunteers
12. Pharmaceutical, food supplement or cosmetic applications : Anti-acne cosmetic and anti-cancer food supplement products
13. Recommended concentrations in the product : 1-5 % w/w
14. Storage : Keep in tight and light protection container at room temperature
15. Precautions : None
16. Cost per kg : Please request

## References

1. Sims CA, Juliani HR, Mentreddy SR, Simon JE. (2014) Essential oils in holy basil (*Ocimum tenuiflorum* L.) as influenced by planting dates and harvest times in North Alabama. **Journal of Medicinally Active Plants.** 2(3): 33-41
2. Rahman MS, Khan MMH, Jamal MAHM. (2010) Anti-bacterial evaluation and minimum inhibitory concentration analysis of *Oxalis corniculata* and *Ocimum sanctum* against bacterial pathogens. **Biotechnology.** 9: 533-536
3. Kath RK, Gupta RK. (2006) Antioxidant activity of hydroalcoholic leaf extracts of *Ocimum sanctum* in animal models of peptic ulcer. **Indian Journal of Physiology and Pharmacology.** 50: 391-396
4. Serrame E, Lim-Sylianco CY. (1995) Anti-tumor promoting activity of decoction and expressed juice from Philippine medicinal plants. **The Philippine Journal of Science.** 124: 275-281
5. Sawarkar HA, Khadabadi SS, Mankar DM, Farooqui IA, Jagtap NS. (2010) Development and biological evaluation of herbal anti-acne gel. **International Journal of PharmTech Research.** 2(3): 2028-2031