

Specification : Paprika extract loaded nanovesicular suspension /  
สารสกัดพริกเก็บกักในอนุภาคนาโน (Manose RM-0001)

(Application : An active ingredient for analgesic / anti-inflammatory and  
hair growth promotion cosmetic products / สารสำคัญในผลิตภัณฑ์สมุนไพร  
เพื่อบรรเทาอาการปวด / ต้านอักเสบ และเครื่องสำอางกระตุ้นการงอกของเส้นผม)

1. Name of the raw material : Paprika extract loaded nanovesicular suspension
2. Active components : Paprika extract 2 % (capsaicin 0.05 %) <sup>(1)</sup>
3. Common and scientific name/  
Family of the plant : Paprika (*Capsicum frutescens* L.)/  
SOLANACEAE
4. Physical appearance : Light brownish turbid suspension with  
specific herbal odor
5. pH : 4
6. Standardization : HPLC fingerprint using capsaicin as a marker
7. Solubility : Miscible and dispersible in water and  
ethanol
8. Microbial contamination : No pathogenic microorganism with less than  
1,000 cfu/g of bacteria, yeast and fungi which  
is conformed to the Thai FDA regulation
9. Biological activities : Analgesic <sup>(2)</sup>, anti-inflammation <sup>(3)</sup>, increase  
blood circulation <sup>(4)</sup> and anti-cancer <sup>(5)</sup>
10. Animal/ human performance  
test : Analgesic and anti-inflammation in human  
volunteers <sup>(2)</sup>
11. Safety : No skin irritation in human volunteers
12. Pharmaceutical, food  
supplement or cosmetic  
applications : Analgesic / anti-inflammatory and hair growth  
promotion in herbal health and cosmetic  
products

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13. Recommended concentrations : 10-20 % w/w in cream / gel / lotion  
in the product
14. Storage : Keep in tight and light protection container  
at room temperature
15. Precautions : For external use only and avoid contacting  
with eyes or soft tissue due to irritation. Do  
not use in children under 6 years old
16. Cost per kg : Please request

### References

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4. Liang YT, Tian XY, Chen JN, Peng C, Ma KY, Zuo Y, *et al.* (2013) Capsaicinoids lower plasma cholesterol and improve endothelial function in hamsters. **Eur J Nut.r** 52(1): 379-388
5. Lin CH, Lu WC, Wang CW, Chan YC, Chen MK. (2013) Capsaicin induces cell cycle arrest and apoptosis in human KB cancer cells. **BMC Complementary and Alternative Medicine**. 2-9