

Specification : Paprika extract / สารสกัดพริก (Manose RM-0016)

(Application : An active ingredient for analgesic and  
hair growth promotion cosmetics / สารสำคัญในผลิตภัณฑ์  
บรรเทาอาการปวด และเครื่องสำอางกระตุ้นการงอกของเส้นผม)

1. Name of the raw material : Paprika extract
2. Active components : Capsaicin
3. Scientific name of the plant / Family : *Capsicum frutescens* L. / SOLANACEAE
4. Physical appearance : Light brownish semi-solid with specific herbal odor
5. pH : 4
6. Standardization : HPLC fingerprint using capsaicin 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 : Analgesic<sup>(1)</sup>, anti-inflammation<sup>(2)</sup>, increase blood circulation<sup>(3)</sup> and anti-cancer<sup>(4)</sup>
10. Animal / human performance test : Analgesic and anti-inflammation in human volunteers
11. Safety : No skin irritation in human volunteers
12. Pharmaceutical, food supplement or cosmetic applications : Analgesic and hair growth promotion cosmetic products

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13. **Recommended** : 0.2 - 0.4 % w/w in cream / gel / lotion  
concentrations in the  
product
14. **Storage** : Keep in tight and light protection container at room  
temperature
15. **Precautions** : External use, avoid contact with eyes or soft tissue  
since irritation will occur. Do not use in children  
under 6 years old
16. **Cost per kg** : Please request

## References

1. Anand P and Bley K. (2011) Topical capsaicin for pain management: therapeutic potential and mechanisms of action of the new high-concentration capsaicin 8% patch. **British Journal of Anaesthesia**. 107(4): 490–502
2. Zimmer AR, Leonardi B, Miron D, Schapoval E, Oliveira JR, Gosmann G. (2012) Antioxidant and anti-inflammatory properties of *Capsicum baccatum*: From traditional use to scientific approach. **J. Ethnopharmacol.** 139, 228–233
3. 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 Nutr.** 52(1): 379-388
4. 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.** 13(46): 2-9