

Specification : Active Cream Pain B (water phase) /

สารสำคัญส่วนบีในผลิตภัณฑ์ครีมแก้ปวด (เฟสน้ำ)

(Manose RM-0036)

(Application : An active ingredient for anti-inflammatory / analgesic / moisturizing cream and cosmetic products / สารสำคัญในผลิตภัณฑ์ต้านอักเสบ / ครีมแก้ปวด และผลิตภัณฑ์เครื่องสำอางให้ความชุ่มชื้น)

1. Name of the raw material : Active Cream Pain B (water phase)
2. Active components : Extracts of Thao En-on and Black Pepper encapsulated in nanoparticles
3. Common and scientific name/
Family of the plant : Thao En-on (*Crytolepis buchmanii* Roem & Schult.)/
ASCLEPIADACEAE; Black Pepper
(*Piper nigrum* L.)/ PIPERACEAE
4. Physical appearance : Light brownish turbid dispersion with specific herbal odor
5. pH : 5
6. Standardization : HPLC fingerprint using piperine as a marker
7. Solubility : Dispersible in water
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-inflammation⁽¹⁻²⁾ and analgesic activities^(1,3)
 10. Animal / human performance test : Anti-sprain⁽³⁾ in human volunteers
 11. Safety : No skin irritation in human volunteers
 12. Pharmaceutical, food supplement or cosmetic applications : Anti-inflammatory/ analgesic/ moisturizing cream and cosmetic products
 13. Recommended concentrations in the product : 2.5 - 10 % w/w (in cream base)
 14. Storage : Keep in dry / cool place and protect from light
 15. Precautions : For external use only / avoid getting into eyes. Rinse off and stop using when there is any undesirable effect.
 16. Cost per kg : Please request

References

1. Hanprasertpong N, Teekachunhatean S, Chaiwongsa R, Ongchai S, Kunanusorn P, Sangdee C, Panthong A, Bunteang S, Nathasaen N, Reutrakul V. (2014) Analgesic, anti-inflammatory, and chondroprotective activities of *Cryptolepis buchanani* extract: *In vitro* and *in vivo* studies. **BioMed Research International**. Article ID 978582
2. Jun SB, Da HO, Hyun MC, Bong-Jun S, Sung-Jig L, Jung YK, Hyung-In Y, Myung CY, Dae-Hyun H, Kyong SK. (2009) Anti-inflammatory and antiarthritic effects of piperine in human interleukin 1 β -stimulated fibroblast-like synoviocytes and in rat arthritis models. **Arthritis Research & Therapy**. 11(2) : 1-9
3. Costa R, Machado J, Abreu C. Evaluation of analgesic properties of *Piper Nigrum* essential oil: A randomized, double-blind, placebo-controlled study. **World Journal of traditional Chinese Medicine**. 2016, 2(2): 60-64